



CI 70



ART.NR. 116402

**EN****ASSEMBLY AND USER INSTRUCTIONS**

Control panel

*Our products are subject to continuous development and we therefore reserve the right to make changes.  
We also disclaim liability for any printing errors that may occur.*

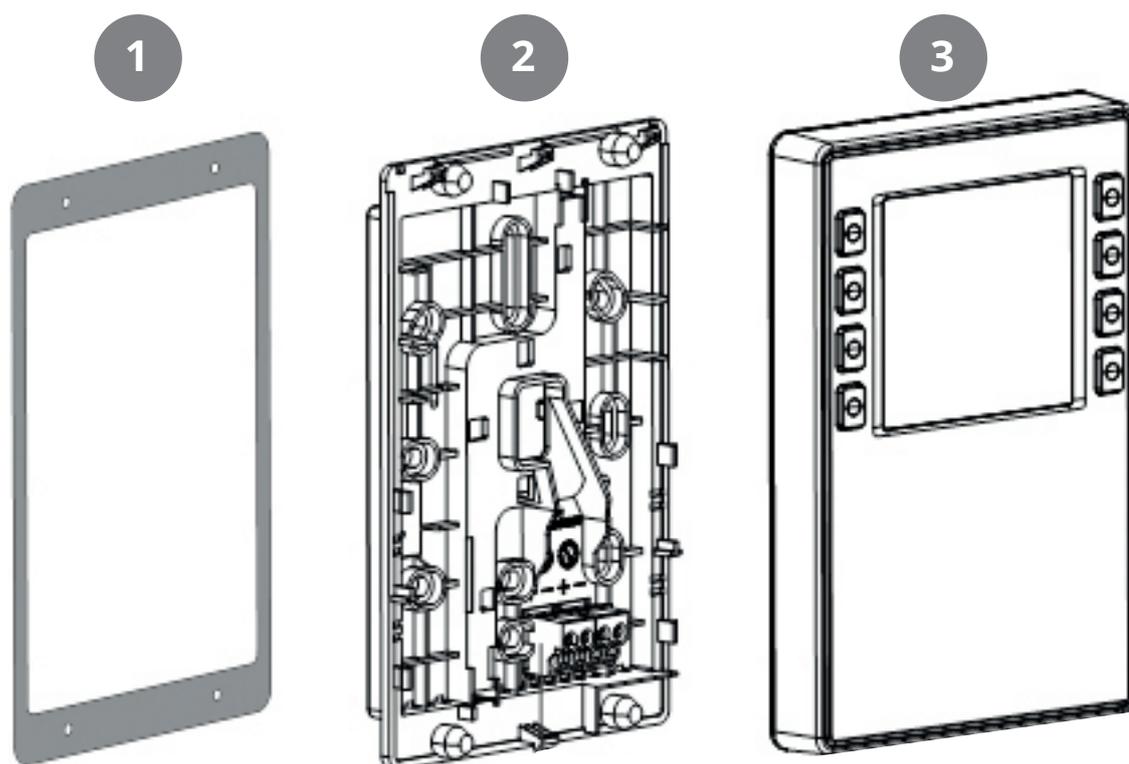
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## 1. Scope

- The CI 70 works together with all ventilation units in the Nordic series
- The CI 70 operates control functions, such as fan and temperature control
- The CI 70 communicates with 2-wire interface to the controller through KNX PL-Link

## 2. Mechanical design



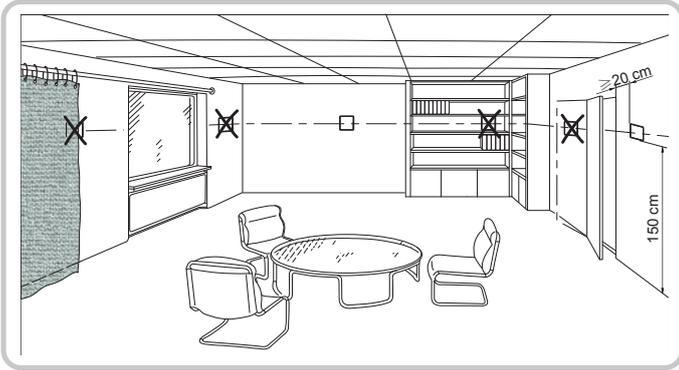
|   |   |
|---|---|
| 1 | <b>Gasket for panel mounting</b>                              |
| 2 | <b>Base plate</b>   |
|   | • with screw holes for all common conduit axes                |
|   | • with gaining channels for wiring from center, up, or bottom |
| 3 | <b>Operator unit</b>  |

 The subsections include important information that is either decisive for the sale or is essential for engineering.

 **National safety regulations**  
 Failure to comply with national safety regulations may result in personal injury and property damage

- Observe national provisions and comply with the appropriate safety regulations.

## 2.1. MOUNTING



- The devices are suitable for wall mounting and panel mounting.
- Recommended height: 1.50m above the floor.
- Do not mount the devices in recesses, shelves, behind curtains or doors, or above or near heat sources.
- Avoid direct solar radiation and drafts.
- Seal the conduit box or the installation tube if any, as air currents can affect sensor readings.
- Adhere to designated ambient conditions.

The cable to the control panel is laid between the ventilation unit and the control panel.  
The control panel is designed for concealed installation above the wallbox.

The included cable is 12 meters. If you need a longer signal cable, order our 24 m cable. Art.no. 118258.

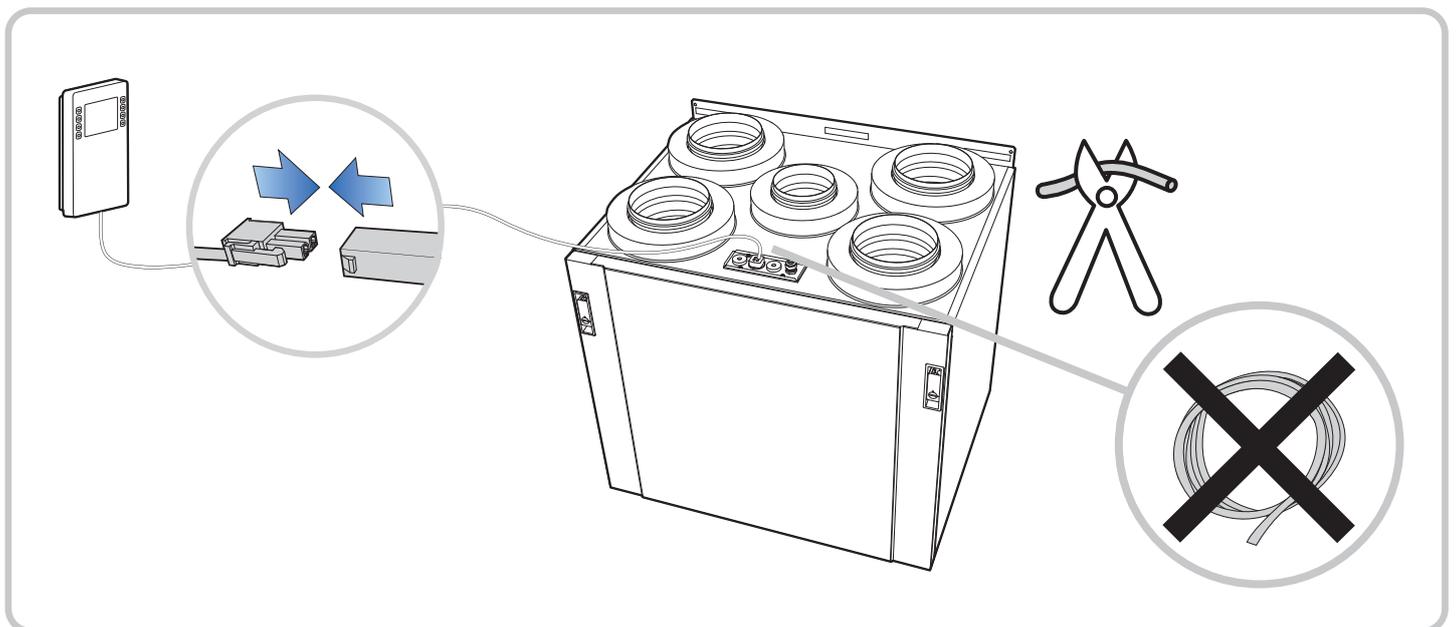


The cable to the CI 70 control panel must be at least 30 cm from the 230 V cable (including dimmers, thermostats, etc.). Power cables must cross the CI 70 signal cable at a right angle. For concealed installation, the cable is laid in 16 mm cable tubes.

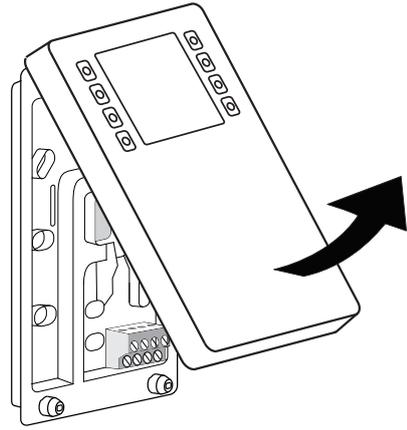
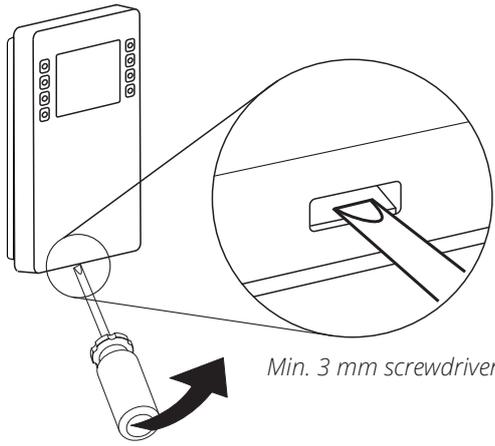
When you have installed the signal cable, pull out all cable at the CI 70 panel to avoid surplus signal cable at the ventilation unit. A roll of cable at the unit may cause disruption. Cut the signal cable to the right length before the next step.



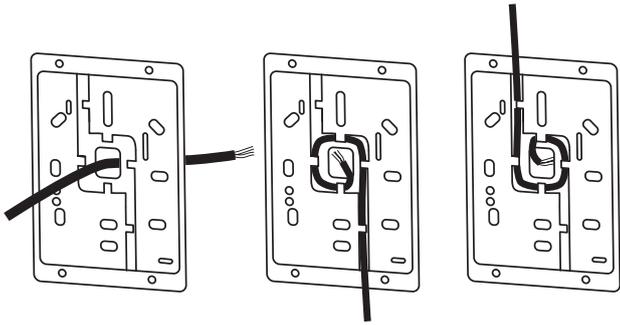
CI 70 control panel must be connected to the ventilation unit before powered ON. After power ON it takes approx. 3 min before the control panel is in operation.



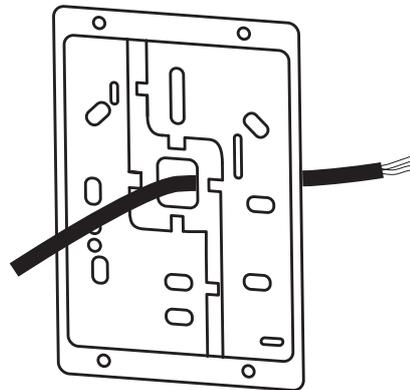
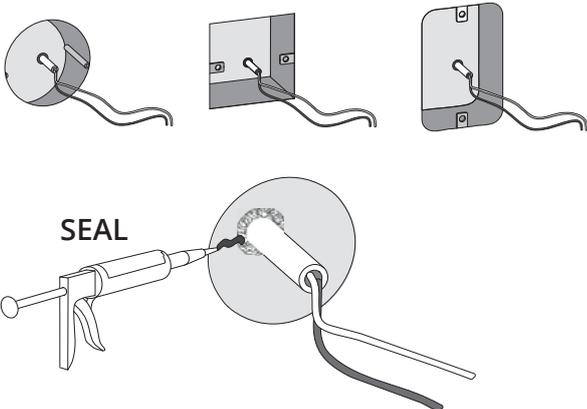
1



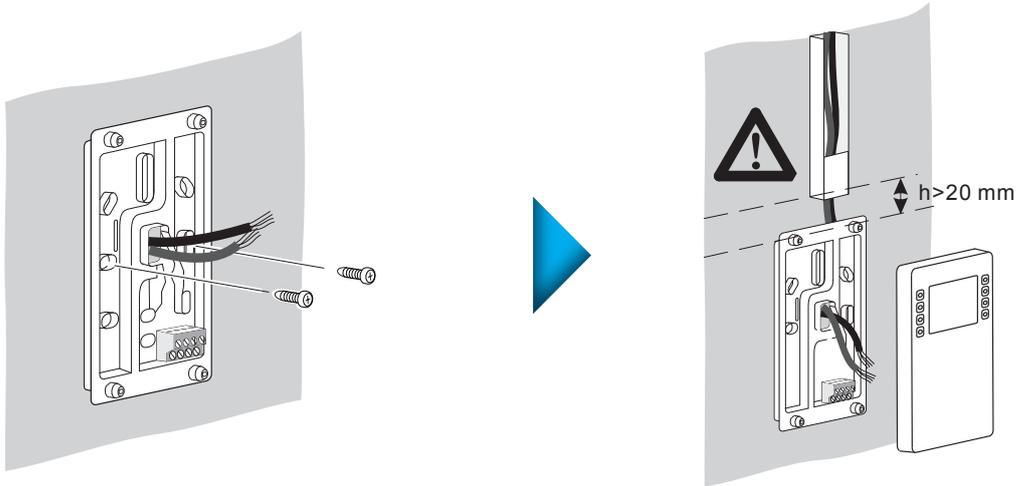
2



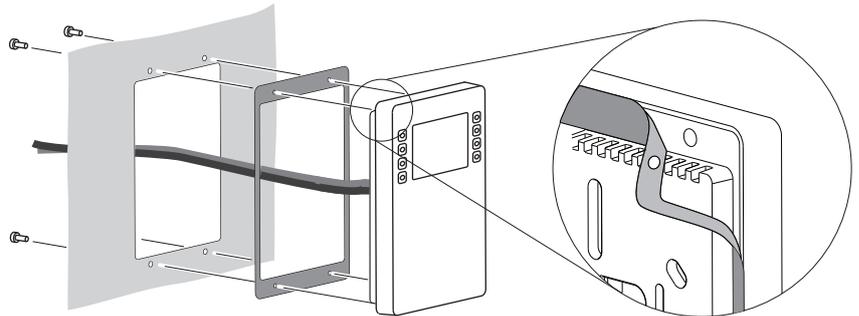
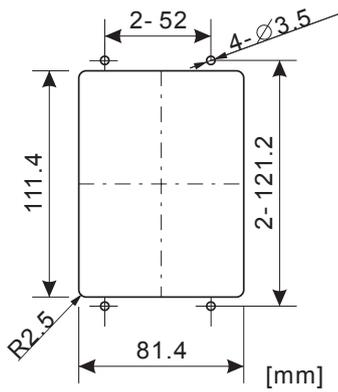
3



4



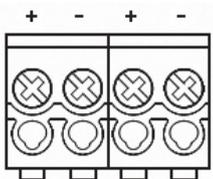
5



6

**Connector**

**Pin Description**

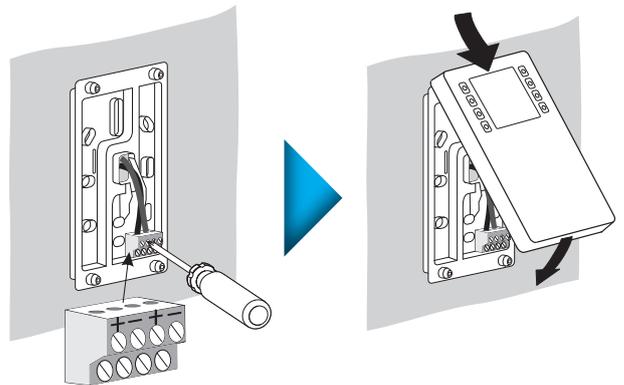


- + KNX PL-Link (positive)
- KNX PL-Link (negative)
- + brown cord
- white cord

**NOTICE!** Installer can choose either pair of the pins to connect.

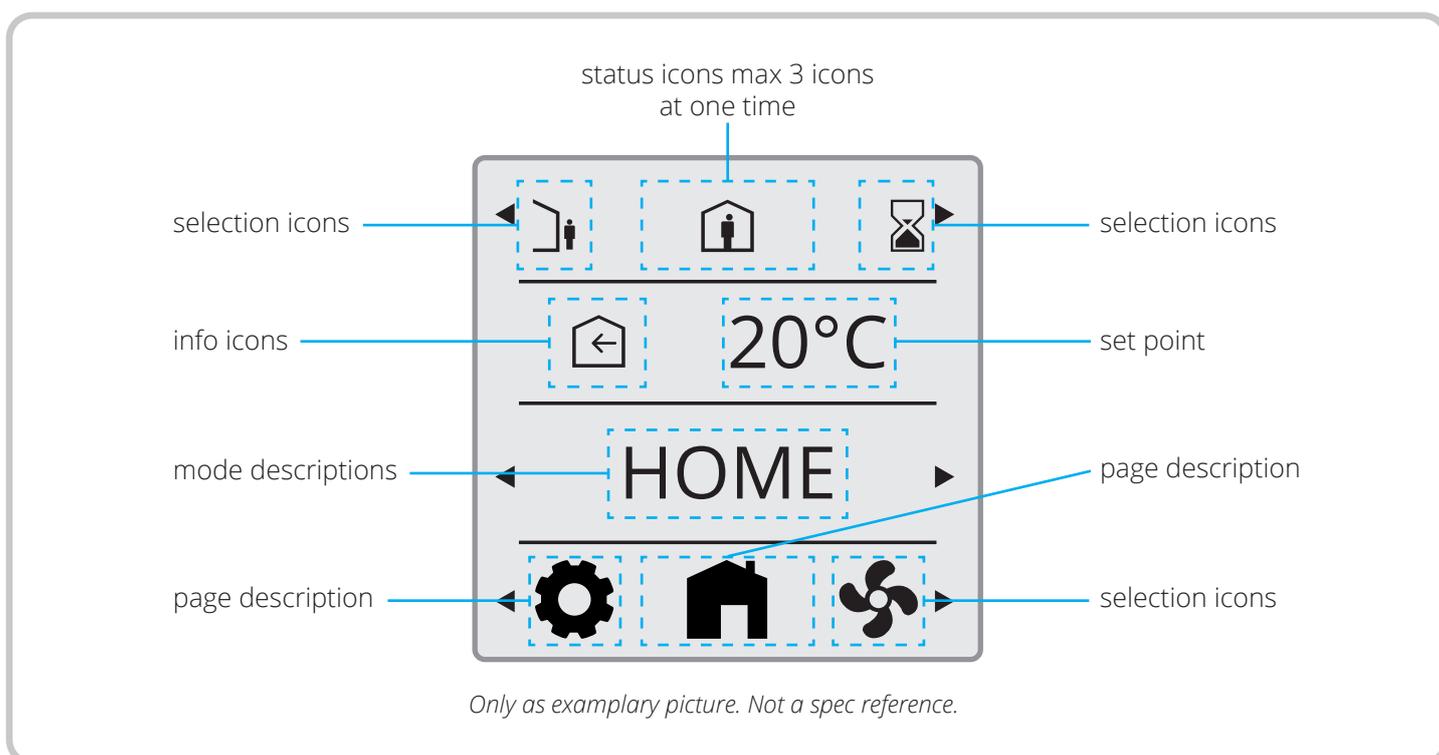


Wires are NOT interchangeable!  
The device is protected against faulty wiring, but communications does not work on interchanged wires.



### 3. Icon description

-  AUTO MODE
-  HOME PAGE
-  AWAY MODE
-  HOME MODE
-  HIGH MODE
-  FIRE PLACE MODE
-  COOKER HOOD MODE
-  SUPPLY AIR
-  EXHAUST AIR
-  FAN SPEED SETTINGS
-  ROOM TEMPERATURE
-  GENERAL SETTINGS
-  CONFIRM
-  CANCEL
-  TIMER MODE
-  ELECTRICAL HEATER ENABLED
-  ELECTRICAL HEATER DISABLED
-  GO BACK
-  ALARM
-  ALARM - NOT ACKNOWLEDGED
-  ALARM - ACKNOWLEDGED
-  NORMAL - ACKNOWLEDGED
-  SERVICE REQUEST
-  SERVICE - NOT ACKNOWLEDGED
-  SERVICE - ACKNOWLEDGED
-  READ PARAMETER MODE
-  CONFIRM ALARM
-  INDICATES AN OPERABLE ELEMENT



**3.1. STATUS ICON DESCRIPTION:**

Position 1

-  ALARM
-  ALARM – NOT ACKNOWLEDGED
-  ALARM – ACKNOWLEDGED
-  NORMAL - ACKNOWLEDGED BUT NOT RESETED

---

-  SERVICE REQUEST
-  SERVICE – NOT ACKNOWLEDGED
-  SERVICE – ACKNOWLEDGED

---

-  AUTO MODE

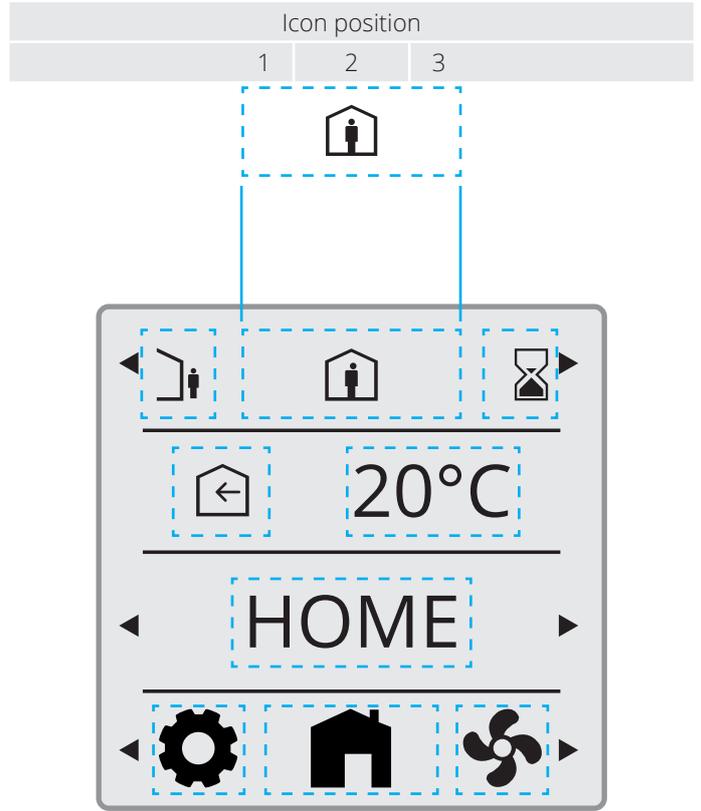
Position 2

-  AWAY MODE
-  HOME MODE

Position 3

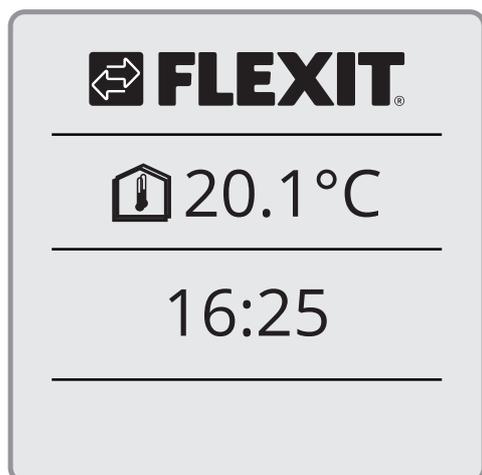
-  HIGH MODE

Status icons max 3 icons at one time



*Only as exemplary picture. Not a spec reference.*

#### 4. Sleep page & home page description



Sleep page

Displays the room temperature at the panel. NB. If the panel is installed in a cold room, the temperature may differ from the indoor temperature elsewhere.

Display actual time.

Backlight switches off after no usage in 3,5 min.  
Display returns to sleep page after no usage in 4,0 min.

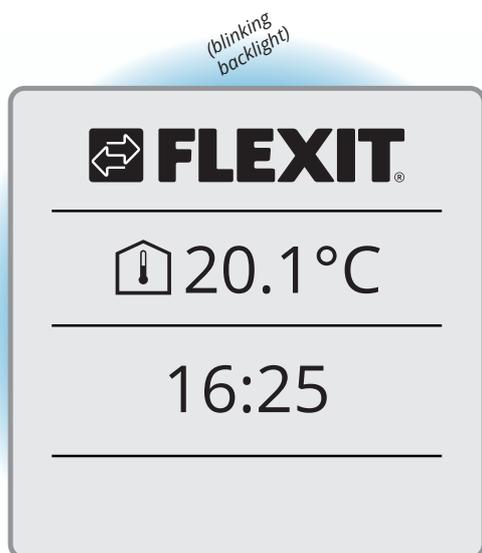


Home page

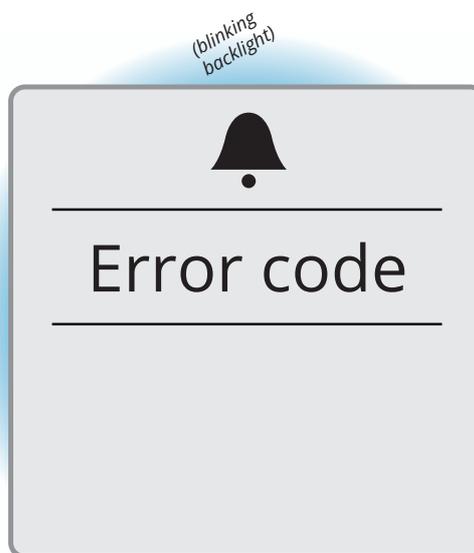
Display supply air temperature setpoint according to operating mode.

Display actual W mode.  
Selection of different modes possible.

Select settings pages.



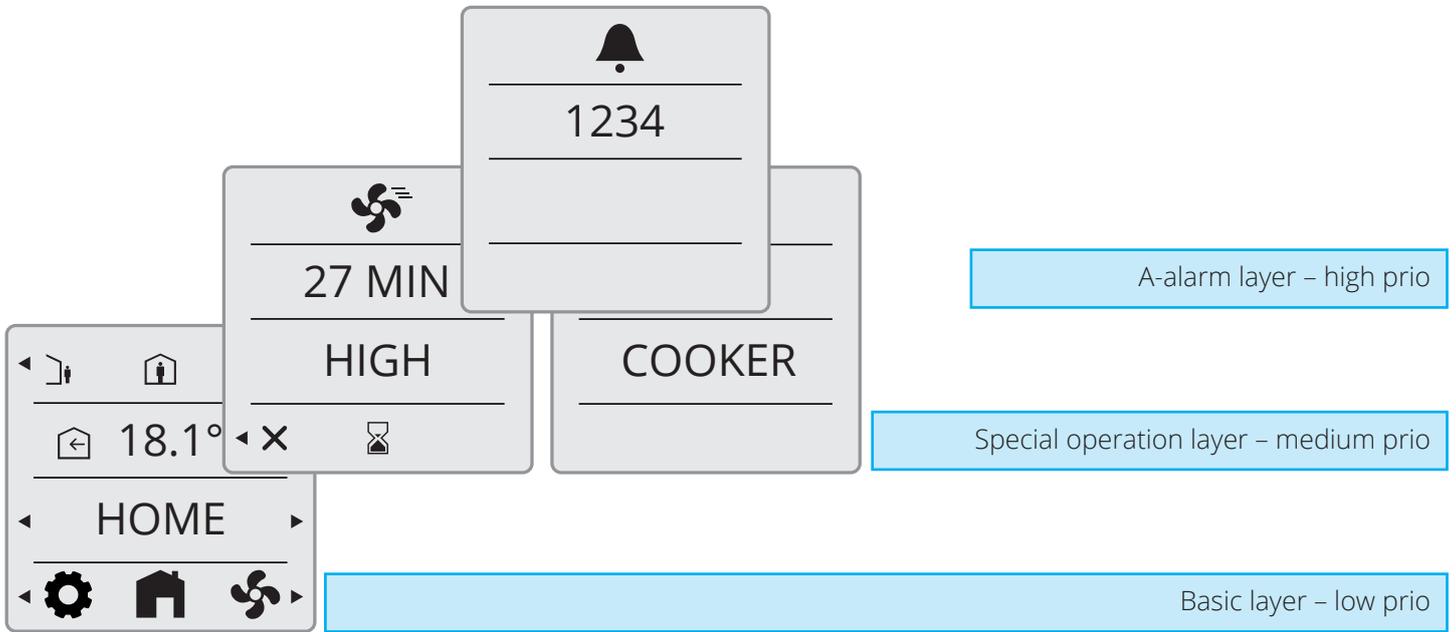
B-alarm  
See section 5.6



A-alarm  
See section 5.6

## 4.1. LAYER CONCEPT

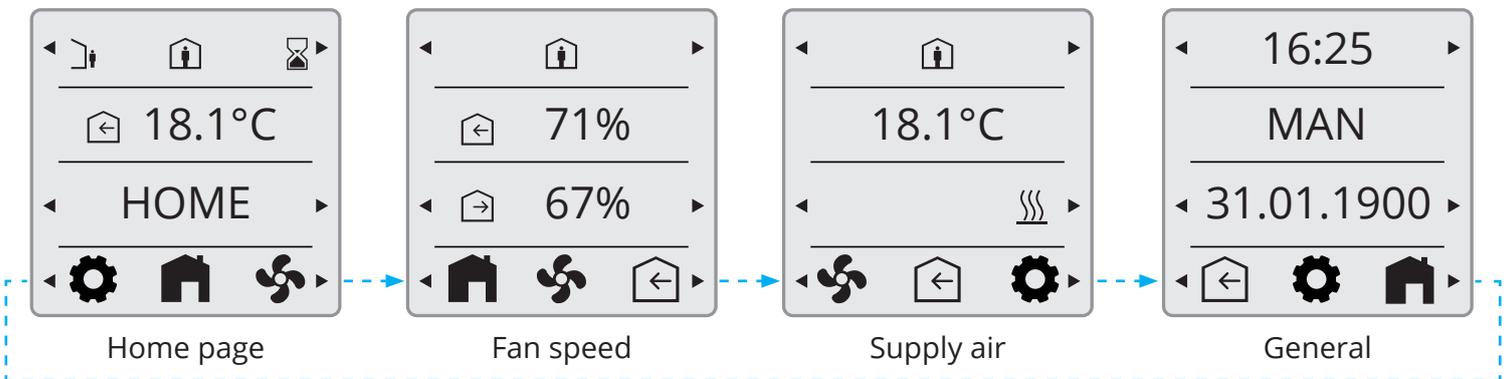
Screens/views are prioritized according to use cases. When screen with higher prio is called/activated it will be the dominant one.



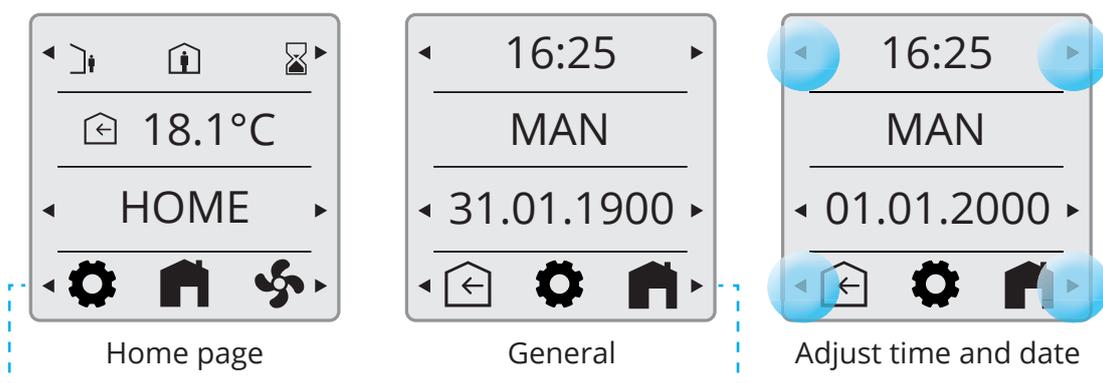
## 5. Settings

### 5.1. GENERAL DESCRIPTION

Each page explained later in detail.



## 5.2. ADJUST TIME DATE & SCHEDULER



### Adjust time:

Press the arrows beside the clock: <- to reduce and -> to increase the time. Hold down to move faster.

### Adjust the date:

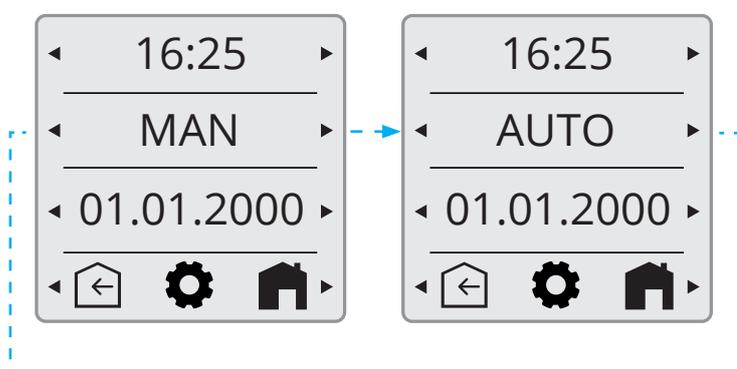
Press the arrows beside the date: <- to reduce and -> to increase the date and year. Hold down to move faster.

### Adjusting MAN/AUTO:

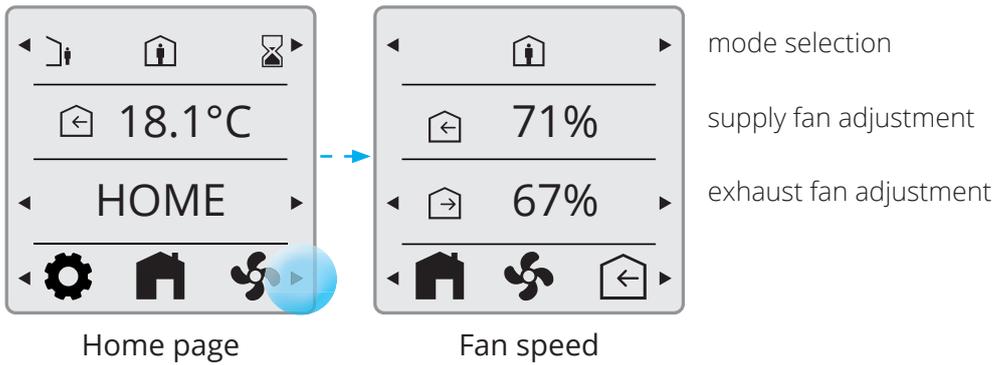
Via the FlexitGO app, you can set the unit to operate in calendar mode, i.e. it changes speed according to a preset timetable. You can select whether the unit will operate in calendar mode via the panel. This is done by selecting HOME mode and then going to General mode (see 5.1). Use the arrows to switch between:

MAN = Calendar off

AUTO = Calendar active if it is configured in the app.



5.3. FAN SPEEDS



**NB.** The fan speeds are factory-set to: Away 50%, Home 75% and High 100%. High must always be set higher than Home, which must be set higher than Away. For example, if you want to set Home lower than 50%, you must first reduce Away so it is always lower than Home. The same applies between Home and High.



**Home:** This is a constant mode and is Intended for normal use when the building is occupied.



**Away:** This is a constant mode and is intended for use when the building is unoccupied for longer periods. You can also set a delayed start, which can be useful if you just got out of the shower before you leave the house.



**High:** This can be both a constant mode and a temporary mode with a set duration. It is intended for use when a higher ventilation demand is temporarily required.



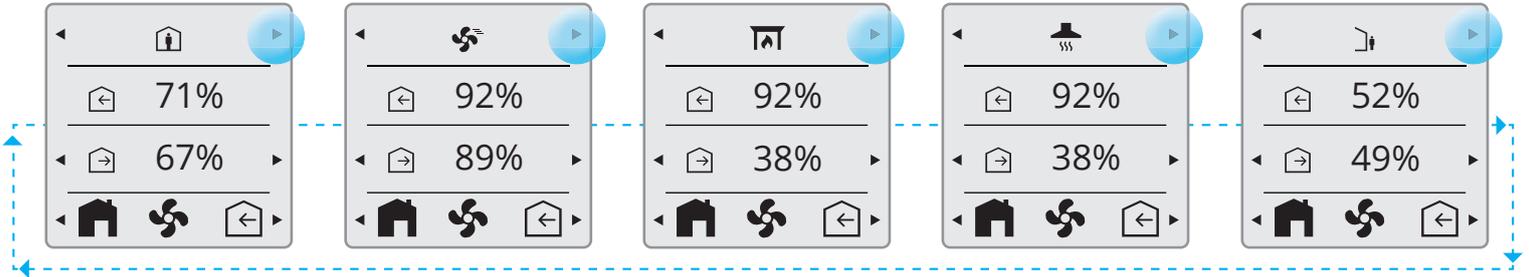
**Fireplace:** This is only available as a temporary mode with a set duration. It is intended for temporary use together with a fireplace. It creates an overpressure in the building to facilitate smoke to go up the chimney, which prevents smoke to enter the building.



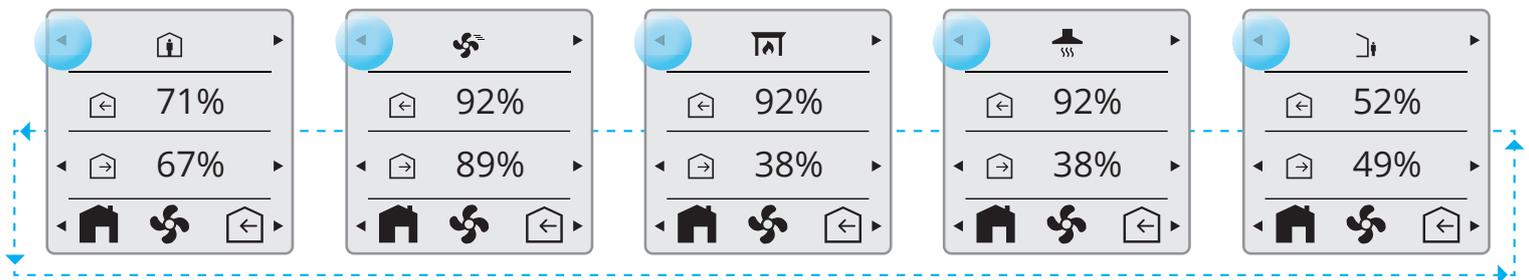
**Cooker hood:** This mode can only be activated using a wireless or cabled accessory, which is mounted in your cooker hood. It activates when you use your cooker hood.

### 5.3.1. Fan speed setting page

Press of button 5 will change the views in loop towards right.



Press of button 1 will change the views in reverse order - loop towards left.



5.4. SUPPLY AIR TEMPERATURES

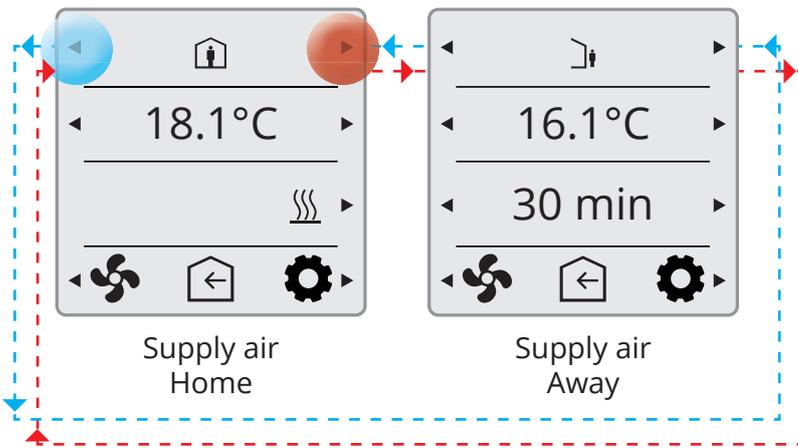


mode selection

supply air temperature adjustment

electrical heater ENABLE/DISABLE  / 

Supply air



HOME/AWAY adjustments

Time delay setting when switching to AWAY mode with button 1.

Supply air Home

Supply air Away

5.4.1. Home page – mode selection



HOME



HOME

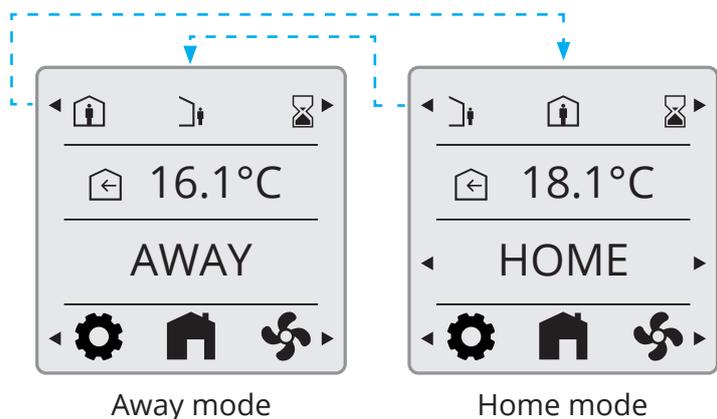
Home speed mode



HIGH

High speed mode

5.4.2. Home page – home/away selection



5.4.3. Home page – in scheduler mode



scheduler mode (time program)



Home speed mode

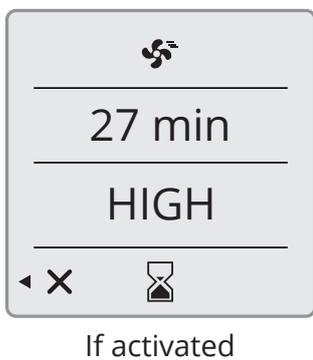
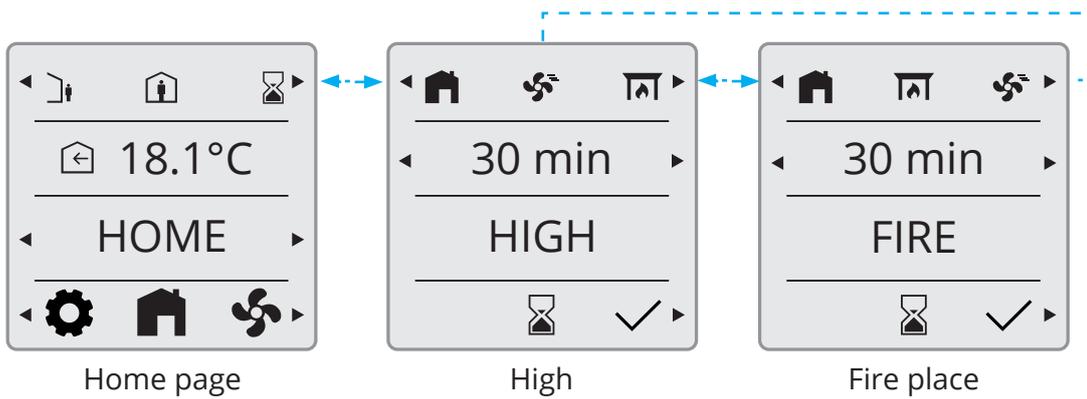


High speed mode



Away mode

5.4.4. Timer functions

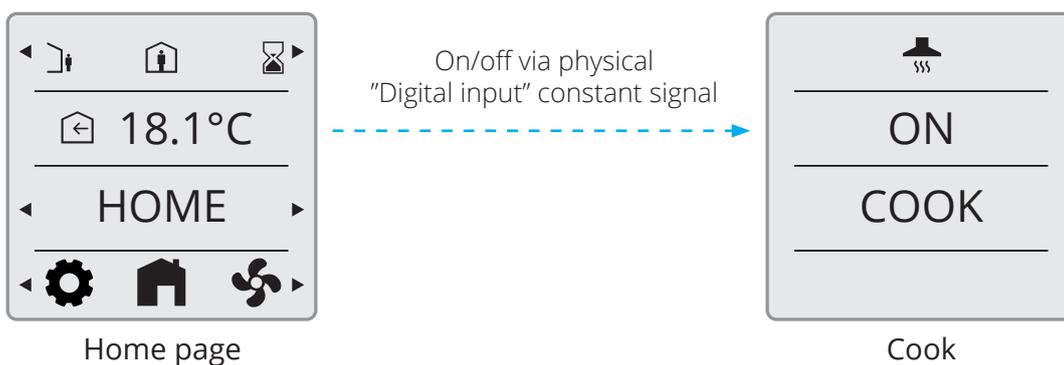


returns to HOME PAGE after prolongation time is elapsed

returns to HOME PAGE if function is canceled

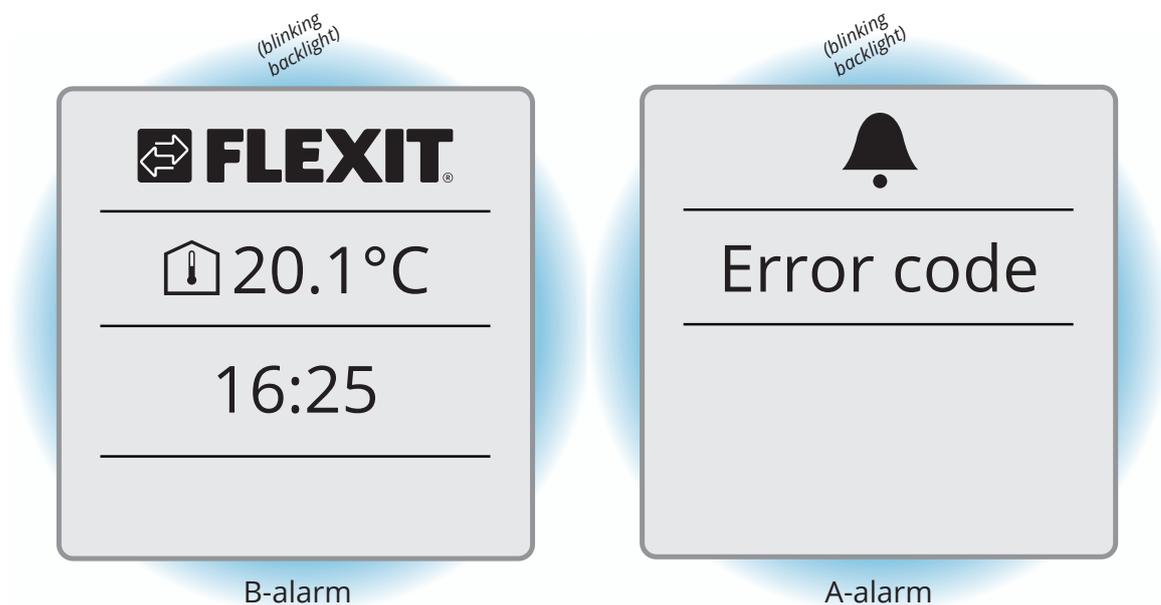
**5.5. INFORMATION**

Activation of cooker hood function via Digital input or wireless accesorie.

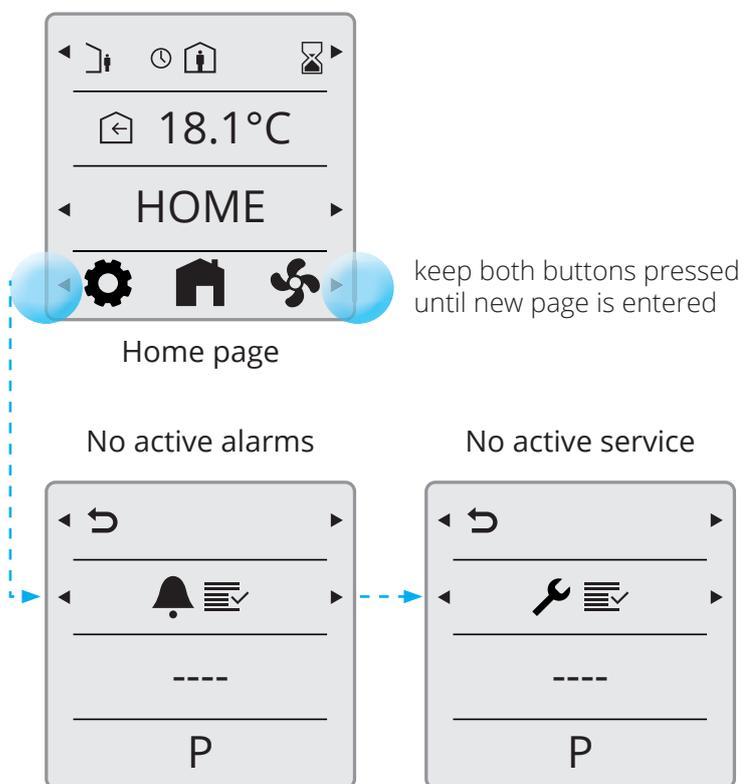


## 5.6. ALARM

In case of alarm, the display will start to blink, and the appearance of the information will depend on alarm class, according to the pictures below.



### 5.6.1. Alarm mode



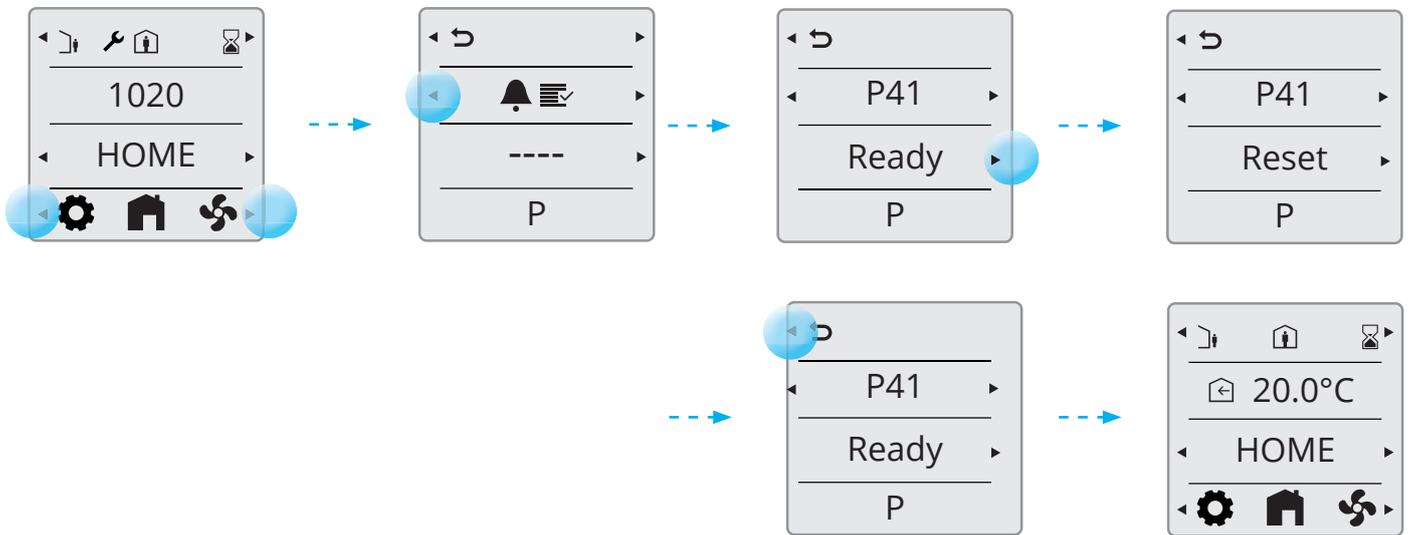
### 5.6.2. Filter alarm

When a filter alarm is active, a tool key is displayed and the alarm code 1020 is displayed. After the filters in the unit have been replaced, follow the procedure, described in two steps below, to reset the filter timer (section 5.6.3) and the alarm. (section 5.6.4)

### 5.6.3. Reset filter timer

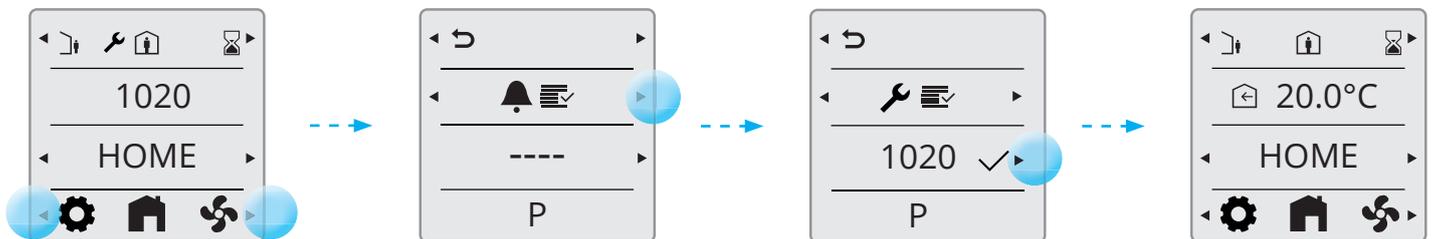
This function is used to reset the filter timer. The function can be used to reset the filter timer before resetting the filter alarm or it can also be used to reset the filter timer if the filter is replaced before the filter alarm has appeared.

**NB!** In case you can't locate parameter P41 on your product, this functionality is not available. Please go to the next step (section 5.6.4) in order to finalize the procedure.



### 5.6.4. Reset filter alarm

This function is used to reset the filter alarm.



Hold down both buttons until the next page is shown.

Then press the right button to select the active alarm.

Confirm/reset by pressing the button.

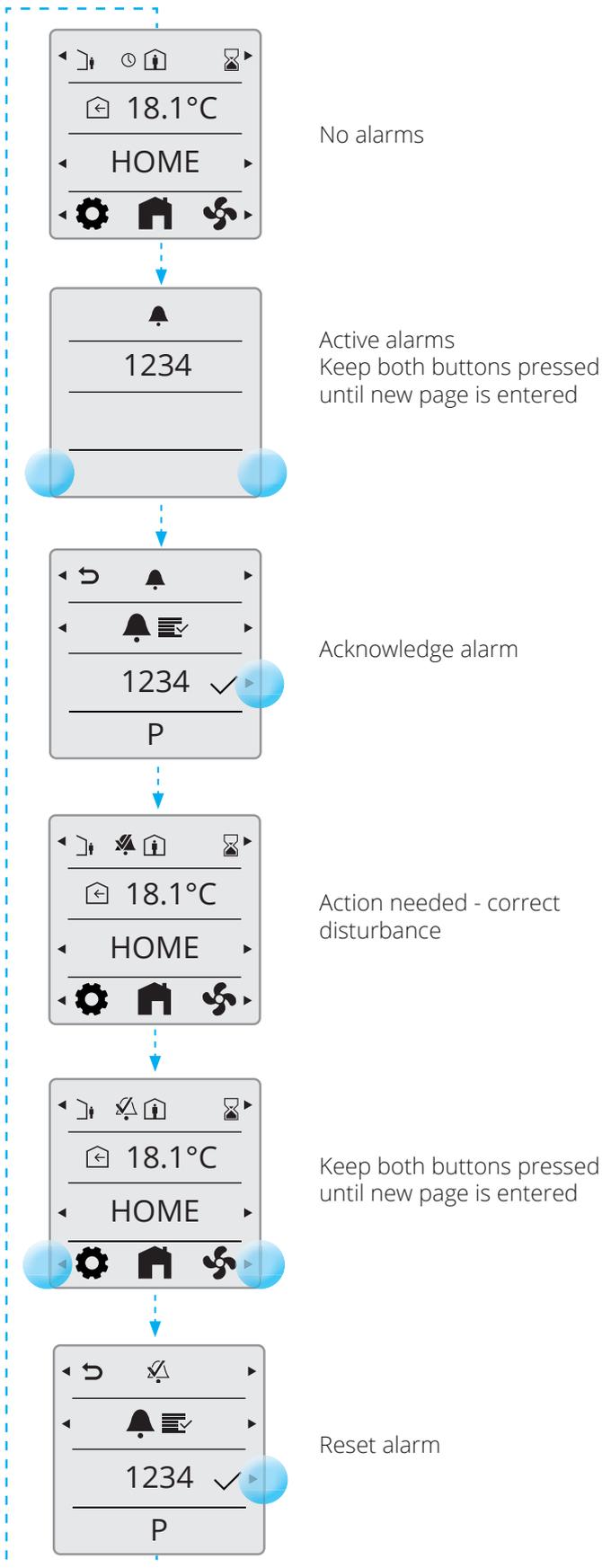
When the alarm has been confirmed, the panel automatically returns to the start page.

### 5.6.5. Filter interval

The unit has a default setting for the filter alarm interval of 6 months. If you want to adjust this, you need to connect to the unit via the FlexitGO app.

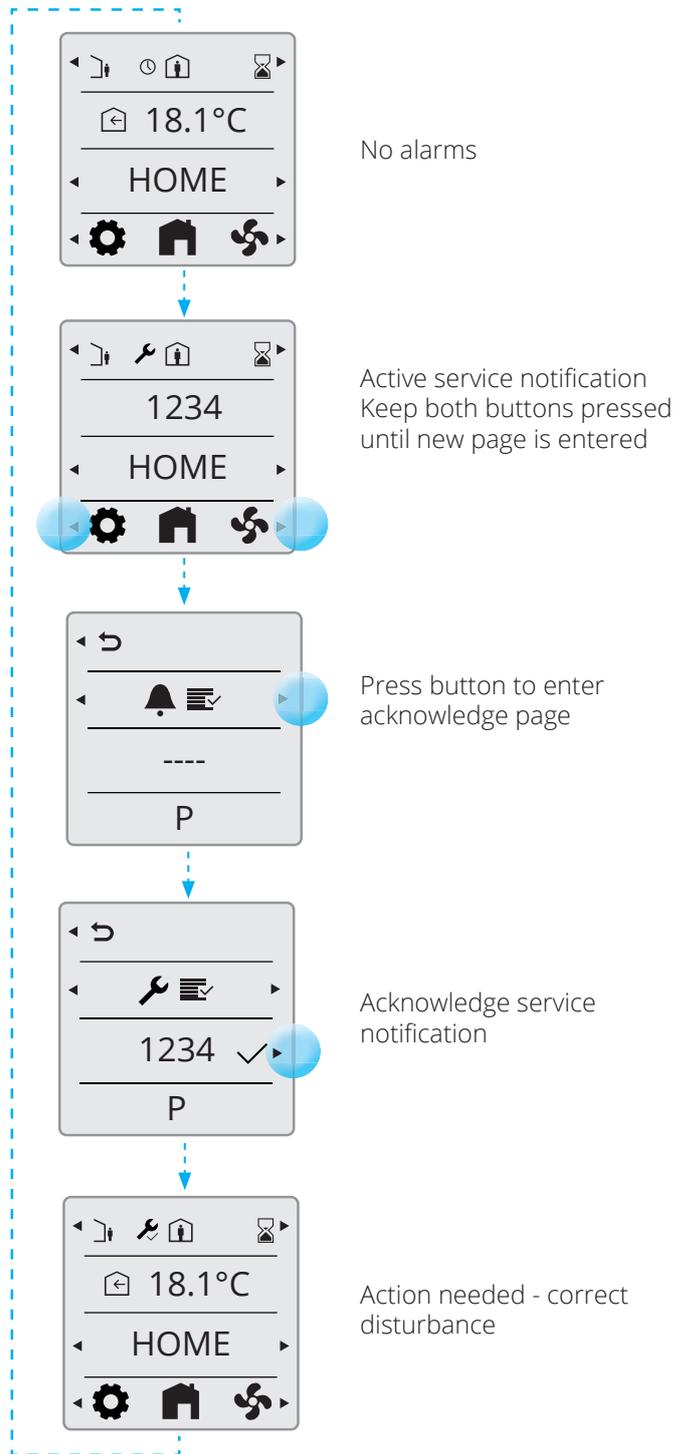
### 5.6.6. Acknowledge and reset A-alarm

In case of critical A-alarms, application operation is locked until alarm is acknowledged and reset.



### 5.6.7. Acknowledge B-alarm

Application is still operational (as much as possible), alarm has to be acknowledged.



### 5.6.8. Alarm codes

| Error code  | Error source               |
|-------------|----------------------------|
| 1000...1999 | Hardware related errors    |
| 2000...2999 | Application related errors |
| 3000...3999 | Communication errors       |

### 5.6.9. Alarm codes – Hardware related errors

| Code #             | A/B-Alarm                        | Name/Text   |
|--------------------|----------------------------------|---|
| <b>1000...1999</b> | <b>Code range for - Hardware</b> |   |
| 1001               | A                                | B1 - Supply air temperature sensor fault              |
| 1002               | B                                | B6 - Exhaust air temperature sensor fault             |
| 1003               | B                                | B3 - Extract air temperature sensor fault             |
| 1004               | A                                | B4 - Outside air temperature sensor fault             |
| 1005               |                                  | B5 - Frost protection temp. Heating coil sensor fault |
| 1006               | B                                | H1 - 0-10 V Humidity sensor fault                     |
| 1007               | B                                | M3 - Rotary heat exchanger motor stuck                |
| 1008               | B                                | M3 - Rotary heat exchanger belt broken                |
| 1009               | A                                | M9 - Fire damper fault                                |
| 1010               | A                                | TM1 - Supply air fan fault                            |
| 1011               | A                                | TM2 - Exhaust air fan fault                           |
| 1012               | B                                | CI-70 - Room temperature sensor on CI-70 fault        |
| 1020               | B                                | Time to replace air filter                            |
| 1034               | B                                | P1 - Differential pressure supply air sensor fault    |
| 1035               | B                                | P2 - Differential pressure exhaust air sensor fault   |
| 1039               | B                                | M3 - Rotary heat exchanger, motor shorted             |
| 1040               | B                                | Low battery wireless device                           |

### 5.6.10. Alarm codes – Application related errors

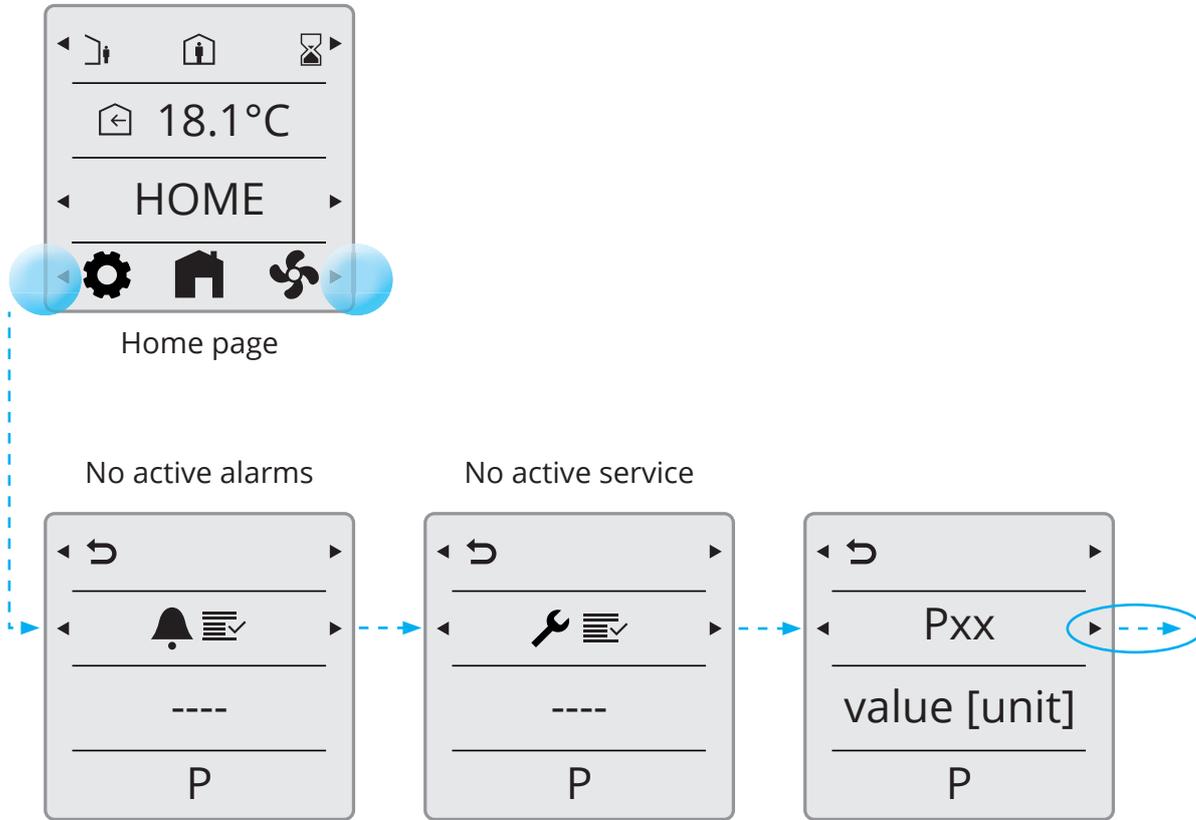
| 2000...2999 | Code range for - Application & Configuration |   |
|-------------|--|---|
| 2001        | A  | X8 - Emergency off  |
| 2002        | A  | X8 - Smoke detector   |
| 2003        | A  | X8 - CO detector  |
| 2004        | A  | Fire alarm - B1 or B3 over max temperature                  |
| 2005        | B  | Supply air temperature outside operating limits             |
| 2007        |  | B5 - Heating coil frost alarm                               |
| 2010        | A  | F10 - electric heater supply air over temperature detection |
| 2024        | B  | EB1 - Electric Heating, unable to control                   |
| 2025        | B  | M3 - Rotary heat exchanger, unable to control               |

### 5.6.11. Alarm codes – Communication errors

| 3000...3999 | Code range for - Communication |   |
|-------------|--------------------------------|---|
| 3004        | B                              | QBM - communication fault, pressure sensor    |
| 3006        | B                              | CI-75 - Communication fault, wireless adapter |
| 3007        |                                | Communication fault, wireless device          |

## 5.7. EXPERT MODE

### 5.7.1. Read parameter mode

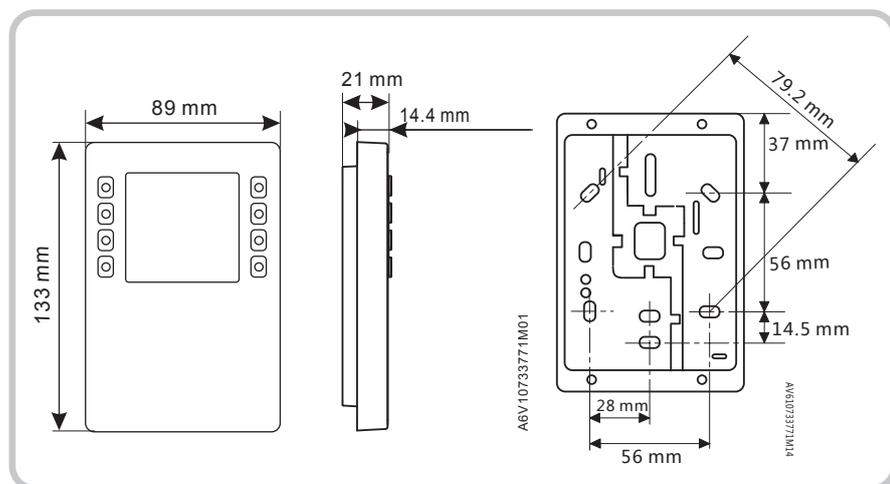


## 5.7.2. Parameter list

| Parameter | Description                              | Unit                     | Actual value |
|-----------|--|--------------------------|--------------|
| P00       | Temperature sensor B4                    | °C                       |              |
| P01       | Temperature sensor B8                    | °C                       |              |
| P02       | Temperature sensor B5                    | °C                       |              |
| P03       | Temperature sensor B1                    | °C                       |              |
| P04       | Temperature sensor B3                    | °C                       |              |
| P05       | Temperature sensor B6                    | °C                       |              |
| P06       | Humidity sensor B6                       | %                        |              |
| P07       | Supply fan M1                            | %                        |              |
| P08       | Tacho TM1                                | Rpm                      |              |
| P09       | Flow sensor P1                           | m <sup>3</sup> /h or l/s |              |
| P10       | Pressure sensor modnus supply air        | Pa                       |              |
| P11       | Supply fan M2                            | %                        |              |
| P12       | Tacho TM2                                | Rpm                      |              |
| P13       | Flow sensor                              | m <sup>3</sup> /h or l/s |              |
| P14       | Pressure sensor modbus extract air       | Pa                       |              |
| P15       | Rotr motor RMC M3                        | %                        |              |
| P16       | Damper M5                                | open/closed              |              |
| P17       | Bypass M4                                | open/closed              |              |
| P18       | Electrical heater/Pump EV1               | %                        |              |
| P19       | Thermostat BT                            | open/closed              |              |
| P20       | Waterbased heater valve M10              | %                        |              |
| P21       | Cooling valve CO                         | %                        |              |
| P22       | Cooling pump CO1                         | on/off                   |              |
| P23       | Fire damper M9                           | open/closed              |              |
| P24       | Feedback fire damper MI4                 | on/off                   |              |
| P25       | Fire/smoke detector                      | on/off                   |              |
| P26       | Damper M6                                | open/closed              |              |
| P27       | Input HIGH                               | on/off                   |              |
| P28       | Input HOME                               | on/off                   |              |
| P29       | Input AWAY                               | on/off                   |              |
| P30       | Input STOP                               | on/off                   |              |
| P31       | Input COOKER HOOD                        | on/off                   |              |
| P32       | Input FIRE PLACE                         | on/off                   |              |
| P33       | Input HOME/AWAY                          | on/off                   |              |
| P34       | Input Air quality                        | ppm                      |              |
| P35       | Input Humidity                           | %RH                      |              |
| P36       | Input Radon                              | Bq/m <sup>3</sup>        |              |
| P37       | Backlight level                          | -                        |              |
| P38       | CI-1 temperature value shift             | K                        |              |
| P39       | Unit selection: Celcius – Fahrenheit     | -                        |              |
| P40       | Unit selection: m <sup>3</sup> /h or l/s | -                        |              |
| P41       | Filter timer                             | -                        |              |

## 6. Technical data

### 6.1. MECHANICAL DIMENSIONS



### 6.2. SPECIFICATION

| General data |                        |
|--------------|------------------------|
| Color        | Signal white (RAL9003) |
| Weight       | 150g                   |

| Power supply*         |                            |
|-----------------------|----------------------------|
| Operating voltage     | KNX / PL-Link DC 21...30 V |
| Max power consumption | 7...10 mA                  |

| Interfaces   |                                      |
|--|--------------------------------------|
| Type of port between room automation station and room operator unit      | KNX / PL-Link                        |
| Baud rate  | 9.6 kbps                             |
| Protocol   | KNX PL-LINK                          |
| Standard KNX plug  | Wire diameter 0.8 mm, max. 1.0 mm    |
| Cable type   | 2-core twisted pair, stranded, solid |
| Single cable length (from room automation station to room operator unit) | <1000 m                              |
| Section  | 0,5...1,5 mm <sup>2</sup>            |
| Bus line polarity  | PL+,PL-                              |
| Bus terminating resister   | not required                         |

| Sensor data        |                               |                       |
|--------------------|-------------------------------|-----------------------|
| Temperature Sensor | Measuring element             | NTC resistance sensor |
|                    | Measuring range               | 0..50 °C              |
|                    | Measuring accuracy (5...30°C) | ±0.8 °C               |
|                    | Measuring accuracy (25°C)     | ±0.5 °C               |

| Ambient conditions and protection classification |      |
|--|------|
| Housing Protection                               | IP30 |

|                                       |  |
|---------------------------------------|--|
| Protection standard as per EN 60529   | IP33 for surface part                  |
| Insulation protection class           | Class III                              |
| <b>Climatic ambient conditions:</b>   |  |
| Normal operation                      | Environmental Conditions: Class 3K5    |
|                                       | Temperature 0...50 °C (0... 122 °F)    |
|                                       | Air humidity <85% rh.                  |
| Transport                             | Environmental Conditions: Class 2K3    |
|                                       | Temperature -25...70 °C (-4... 158 °F) |
|                                       | Air humidity <95% rh.                  |
| <b>Mechanical ambient conditions:</b> |  |
| Normal operation                      | Class 3M2                              |
| Transport                             | Class 2M2                              |

|  |   |
|--|---|
| <b>Standards, directives and approvals</b> |   |
| EU conformity (CE)                         |   |
| RCM conformity to EMC emission standard    |   |
| CSA Compliance                             | CSA C22.2M205   |
| IC Compliance                              | CAN ICE-3(B)/NMB-3(B)   |
| UL Compliance                              | UL916, UL873/UL60730  |
| FCC Compliance                             | Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation. |

### 6.3. MAINTENANCE

The device can be cleaned with off-the shelf, solvent-free cleaning agents.

Do not use mechanical aids (rough sponge or similar materials) – only a soft, damp cloth.

### 6.4. DISPOSAL



The device is considered an electronics device for disposal in terms of European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.





Flexit AS, Televeien 15, N-1870 Ørje  
[www.flexit.no](http://www.flexit.no)