QUICK START GUIDE TKM CONTROL

TROX® TECHNIK
The art of handling air

1 – General Overview

Information button [Info]
When pressed, turns back to Main menu

Password entered
It shows a key icon when password is entered

```
Info    🔑  Start page
            Main menu
            Main overview
            Manual operation        Off
            Operating mode          Off
            Outside air temp     20.1 °C
            Supply air temp      26.0 °C
            Extract air temp     23.4 °C


    🔔              ESC              OK
```

Manual Operation
Here is set the manual ON/OFF.
  [Auto] The unit starts or stops accordingly to what the external BMS or schedule indicates.
  [Off] The unit manually stops.
  [Stage1] The unit manually starts.

Operating Mode
Shows the state in which the unit is.
  [Off] The unit has been normally stopped or due to an alarm.
  [Startup] The unit is starting.
  [On] The unit has been started

Selection knob
When turned on, it changes the selection or values.
When pressed in, it confirms the values.

Escape button [ESC]
It goes back in the menus when is pressed

Alarm button
It blinks red when there is an active alarm *(see chapter <6 – Alarms> for more information)*

2 – Reading working values

```
Start page                         Main menu                    Unit
Main menu                          Password enter               Main overview
Main overview                      Unit                         Inputs
Manual operation        Off        Communication                Outputs
Operating mode          Off        Global functions             Operating mode
Outside air temp     20.1 °C       Alarm handling               Setpoints/settings
Supply air temp      26.0 °C       System objects               Damper control
Extract air temp     23.4 °C                                    Fan control
                                                                Temp control
```

Inputs
Here we can read temperature, humidity and flow values.

Outputs
Here we can read the fan speed, the aperture signals of the cooling and/or heating coils, state of recovery wheel, dampers, etc.

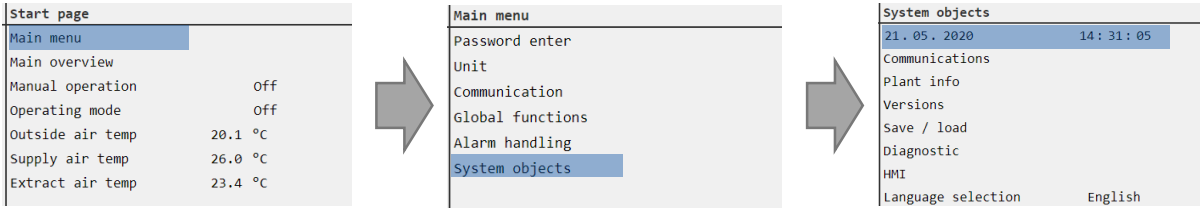** Depending on the configuration of each AHU, all values may not be available.*

3 – Entering the password

```
Start page                         Main menu                    Enter password
Main menu                          Password enter               Entry              ****
Main overview                      Unit
Manual operation        Off        Communication                    1000
Operating mode          Off        Global functions
Outside air temp     20.1 °C       Alarm handling
Supply air temp      26.0 °C       System objects
Extract air temp     23.4 °C
```
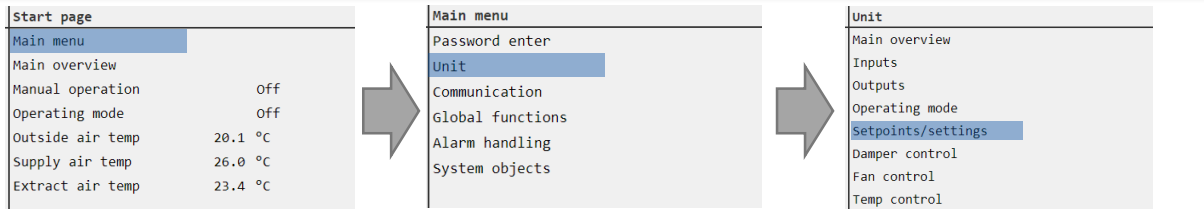
When the password has been entered, you will see the key icon [🔑] in the upper left corner of the start page.
The password is mandatory to change configuration values, setpoints and acknowledge alarms.

4 – Date / time adjust

```
Start page
Main menu
Main overview
Manual operation        Off
Operating mode          Off
Outside air temp        20.1 °C
Supply air temp         26.0 °C
Extract air temp        23.4 °C
```

```
Main menu
Password enter
Unit
Communication
Global functions
Alarm handling
System objects
```

```
System objects
21. 05. 2020            14: 31: 05
Communications
Plant info
Versions
Save / load
Diagnostic
HMI
Language selection      English
```

5 – View / modify setpoints and Schedule

```
Start page
Main menu
Main overview
Manual operation        Off
Operating mode          Off
Outside air temp        20.1 °C
Supply air temp         26.0 °C
Extract air temp        23.4 °C
```

```
Main menu
Password enter
Unit
Communication
Global functions
Alarm handling
System objects
```

```
Unit
Main overview
Inputs
Outputs
Operating mode
Setpoints/settings
Damper control
Fan control
Temp control
```

Upper return temperature. If the return temperature reading rises over this setpoint value, the AHU will try to cool down the supply air.

Lower return temperature. If the return temperature reading lowers under this setpoint value, the AHU will try to heat up the supply air.

Lower return temperature. When the AHU is cooling, it will not supply air cooler than this temperature setpoint.

Upper supply temperature. When the AHU is heating, it will not supply air warmer than this temperature setpoint.

Return humidity. Return humidity value that is intended to be reached by the humidifier.

Maximum supply humidity. When the AHU is humidifying, it will not exceed this value in the supply air.

Airflow setpoints. Depending on the AHU's configuration, they will be showed in flow units [l/s] or pressure units [Pa]
Supply and return have independent setpoints.

Time switch program. Here the schedule is set up by the user when there is no external BMS or when needed.
Initially, the Monday start/stop timing is set and afterwards it can be copied on the rest of the required weekdays.

```
Main setpoints
Time switch program       Off
Comfort clg stpt          22.0 °C
Comfort htg stpt          20.0 °C
Supply tmp min stpt       15.0 °C
Supply tmp max stpt       25.0 °C
Hum stpt rel              40 %rH
Supply hum max stpt      80.0 %rH
Sply fan st 1 stpt        40 l/s
Extr fan st 1 stpt        40 l/s
```

```
Schedule
Present value             Off
Monday                    Passive
Copy schedule             Mo to
Tuesday                   Passive
Wednesday                 Passive
Thursday                  Active
Friday                    Passive
Saturday                  Passive
```

Copy schedules from Monday

```
d Monday
Time 1          00 : 00
Value 1         Off
Time 2          07 : 00
Value 2         Stage1
Time 3          22 : 00
Value 3         Off
Time 4          * : *
Value 4         Off
```

Start time

Stop time

6 – Alarms

Red Alarm Button
Active Alarm

Press the button

Alarm Description

Date and time when it has been produced

```
s Alarm list detail
+ Supply filter alarm: Alarm
2                         Low(B)
21 . 05 . 2020            14 :40 :44
```

Alarm priority
Critical A: stops the unit
Low B: does not stop the unit

When the malfunction has been resolved

Press the button

```
s Alarm list
Acknowledge               1
+ Supply filter alarm: Alarm
```

Acknowledge and execute

Alarm button not lighted

Alarm deactivated