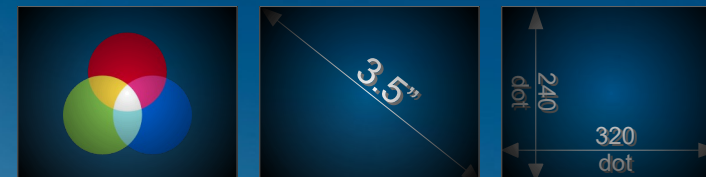




main feature

The main feature of the XPFC is the color display screen (3.5") with 320x240 dots resolution with led backlighting. XPFC is made in DIN 96x96 format and the module dimensions are 96x96mm.

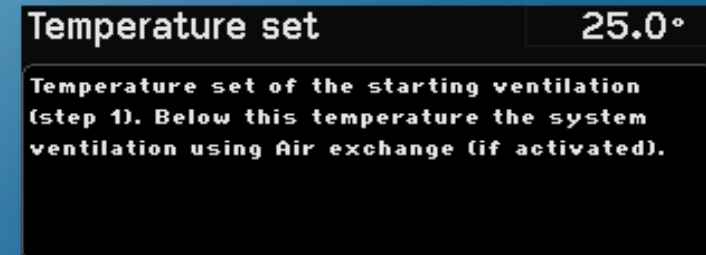
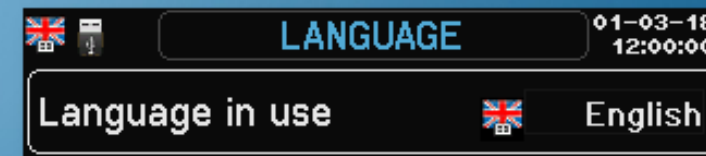


The user interface is easy and friendly. The easy touch screen system gives both the typical "easy to use" approach of a touch screen system and the strength and mechanical protection of a polycarbonate IP54 keyboard.

At every screen the function keys display a different graphic making the program very user friendly.

The user can select the display language: all the wordings, acronyms and "help" texts for programming assistance will be displayed in the chosen language.

Each programming step has its own help screen so the program has a "built in" instruction manual.



XPFC natural ventilation for agricultural environment



XPFC manages the climate of a natural ventilated house. Air exchanges are mainly regulated by operating air inlet windows.

XPFC manages the climate control of windows (up to 4 independent zones), Ventilation (0 ... 100% speed adjustment), Heating and Cooling.

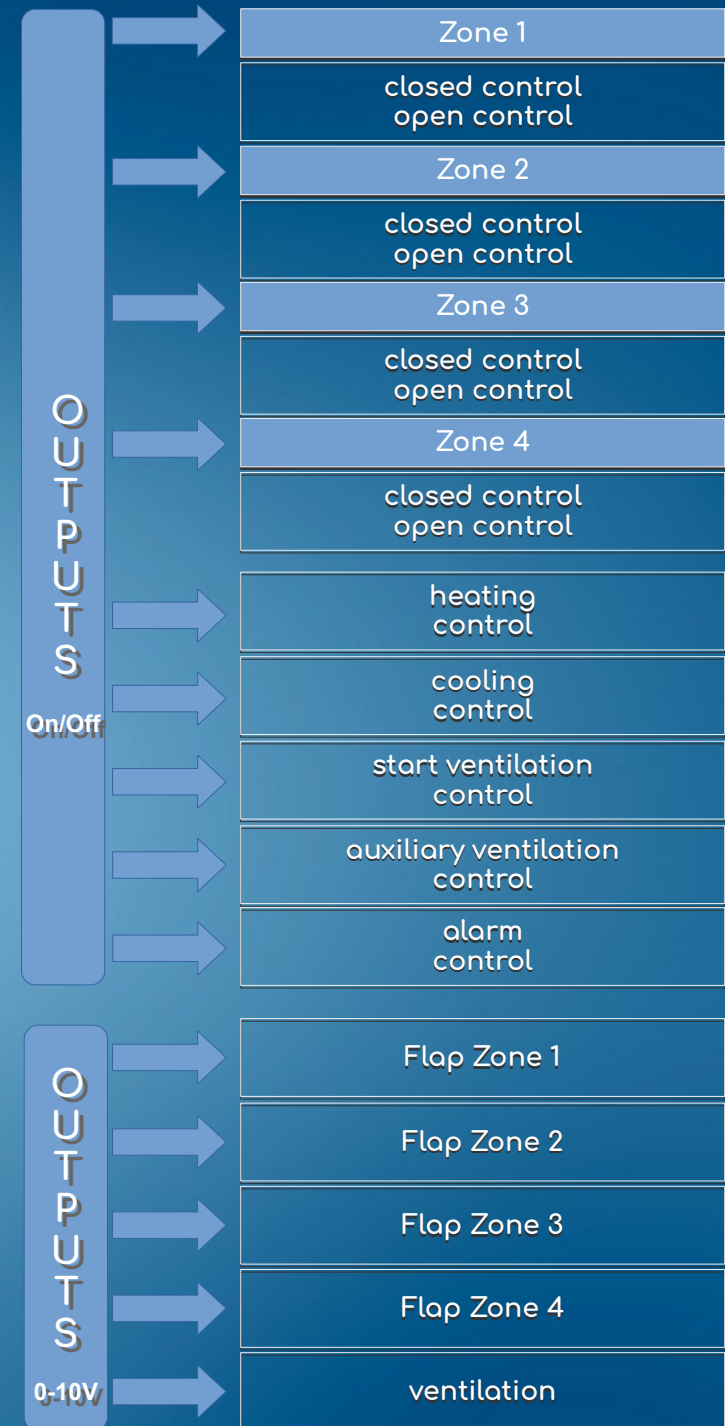
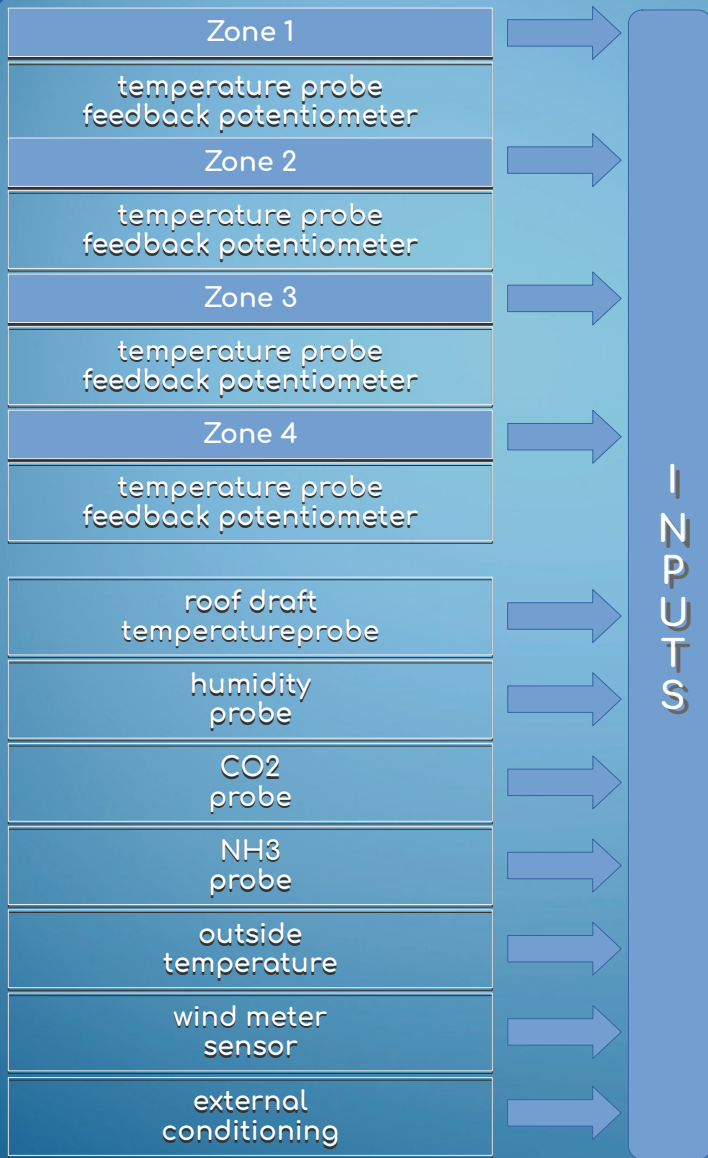
In addition to room temperature, natural ventilation can be affected by humidity, CO2 (carbon dioxide), NH3 (ammonia) and external temperature.

You can program the operating calendar so that the program automatically adapts to the animal growth curve day by day.

All the climate parameters controlled by the XPFC are recorded and can be exported via USB key.

Remote supervision ensures complete PC management of all XPFCs connected to the network.

inputs and outputs



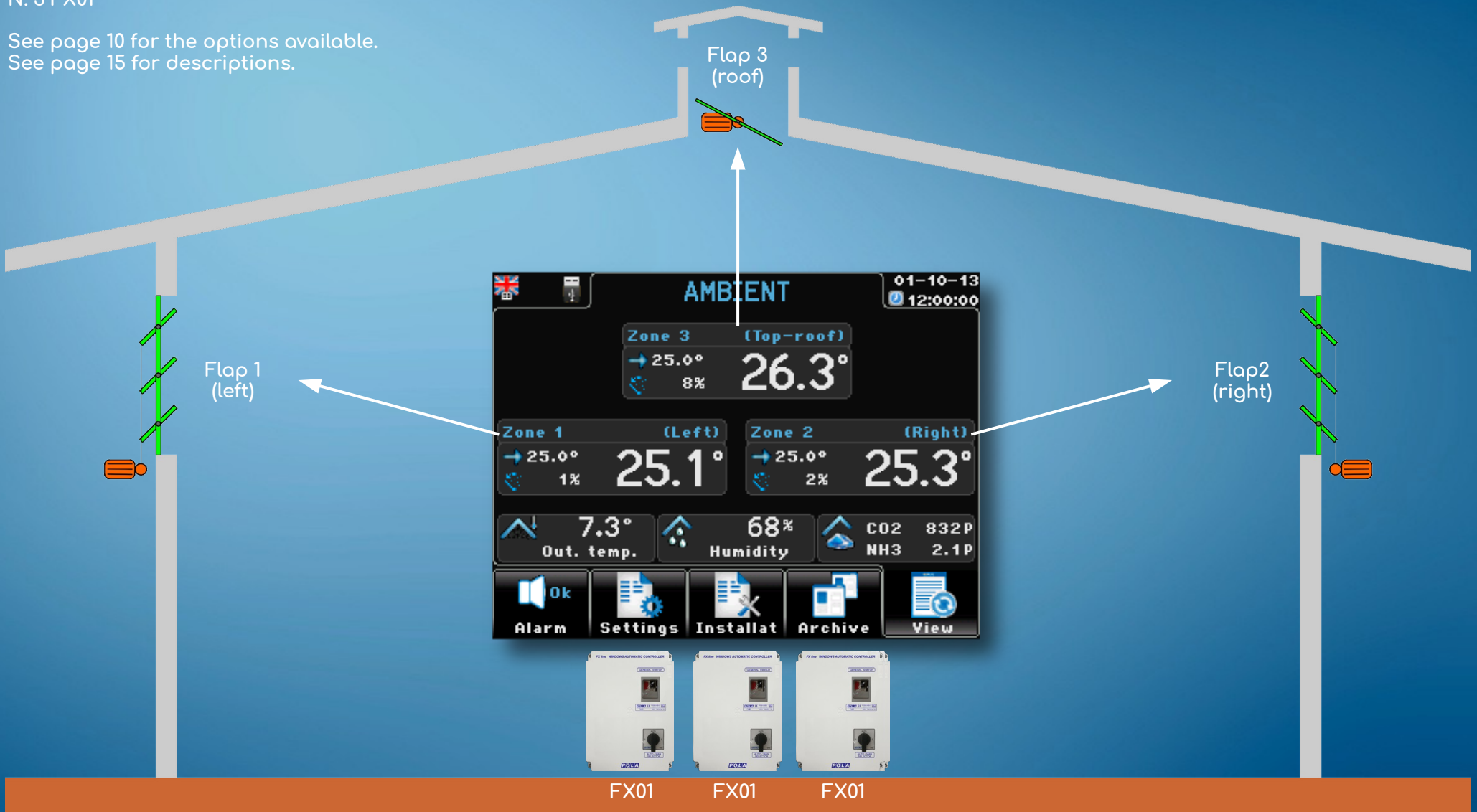
- Other available connections
- USB plug
XPFC has a USB plug inside.
 - XNET
Network connection card (optional) for XPFC processor (see remote supervision).

example of windows application: left / right / roof

Required components:

- N. 1 XPFC
- N. 3 FX01

See page 10 for the options available.
See page 15 for descriptions.



example of windows application: left / right / roof left / roof right

Required components:

- N. 1 XPFC
- N. 4 FX01

See page 10 for the options available.
See page 15 for descriptions.



example of windows application: left 1 / right 1 / left 2 / right 2

Required components:

- N. 1 XPFC
- N. 4 FX01

See page 10 for the options available.
See page 15 for descriptions.

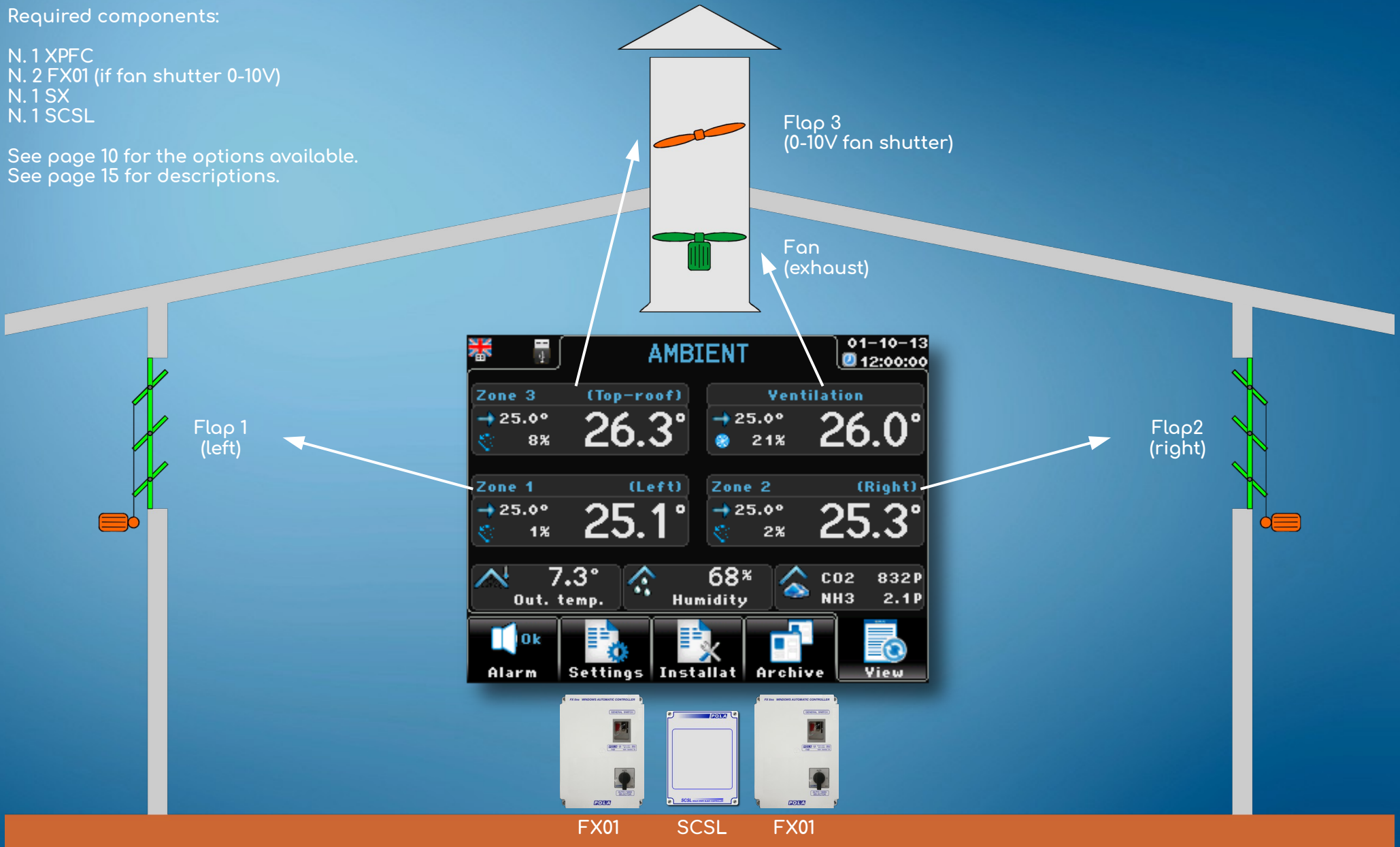


example of windows application: left / right / exhaust ventilation

Required components:

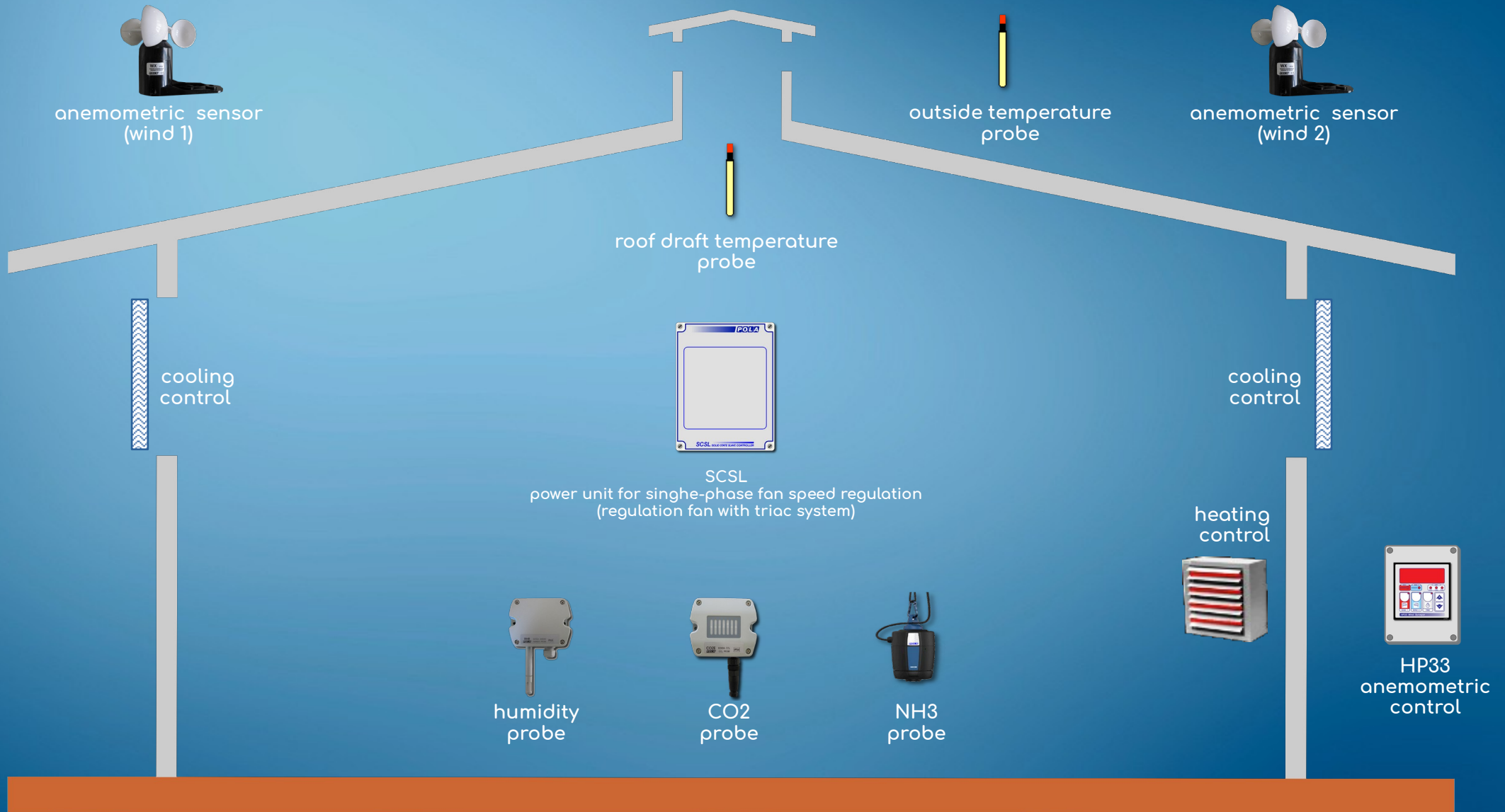
- N. 1 XPFC
- N. 2 FX01 (if fan shutter 0-10V)
- N. 1 SX
- N. 1 SCSL

See page 10 for the options available.
See page 15 for descriptions.

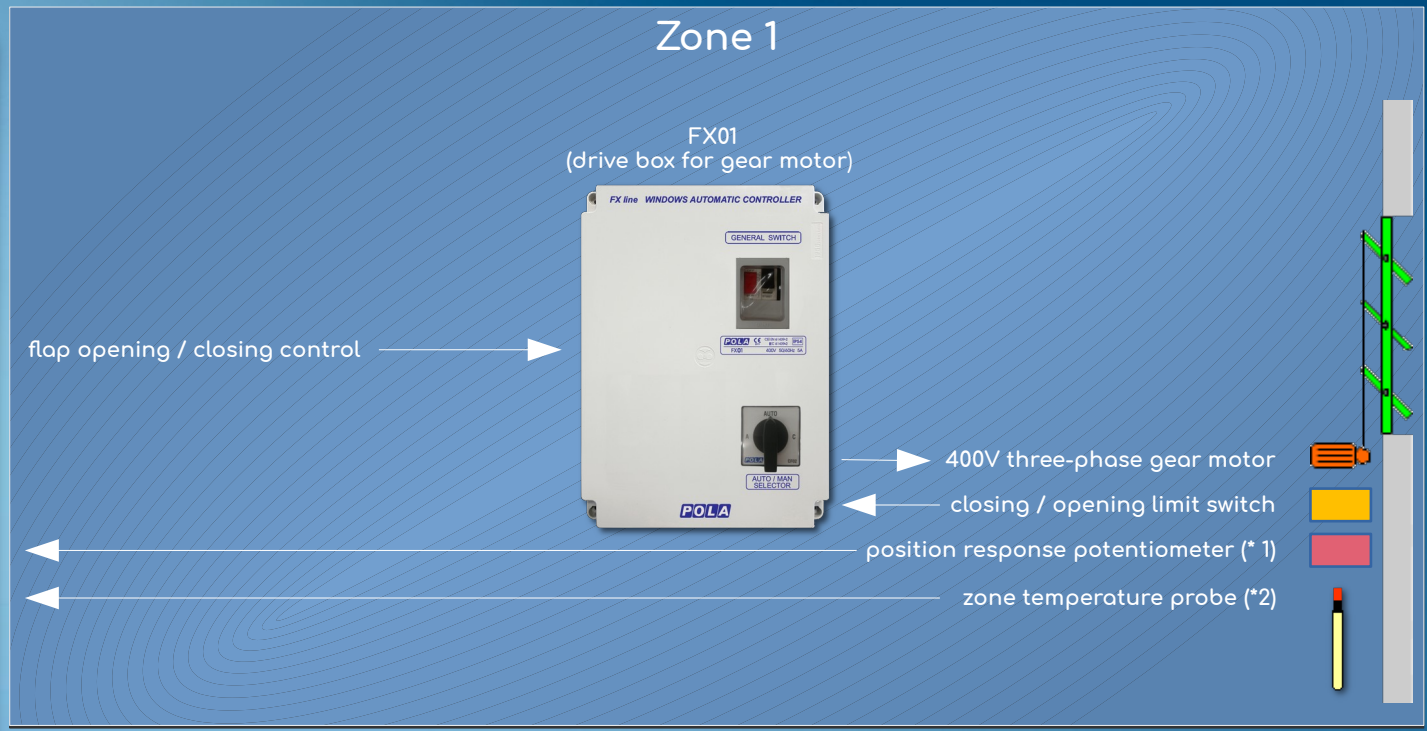


options available

Depending on the system to be operated, the options shown on this page are available.
See page 15 for options description.



three-phase gearmotor application diagram



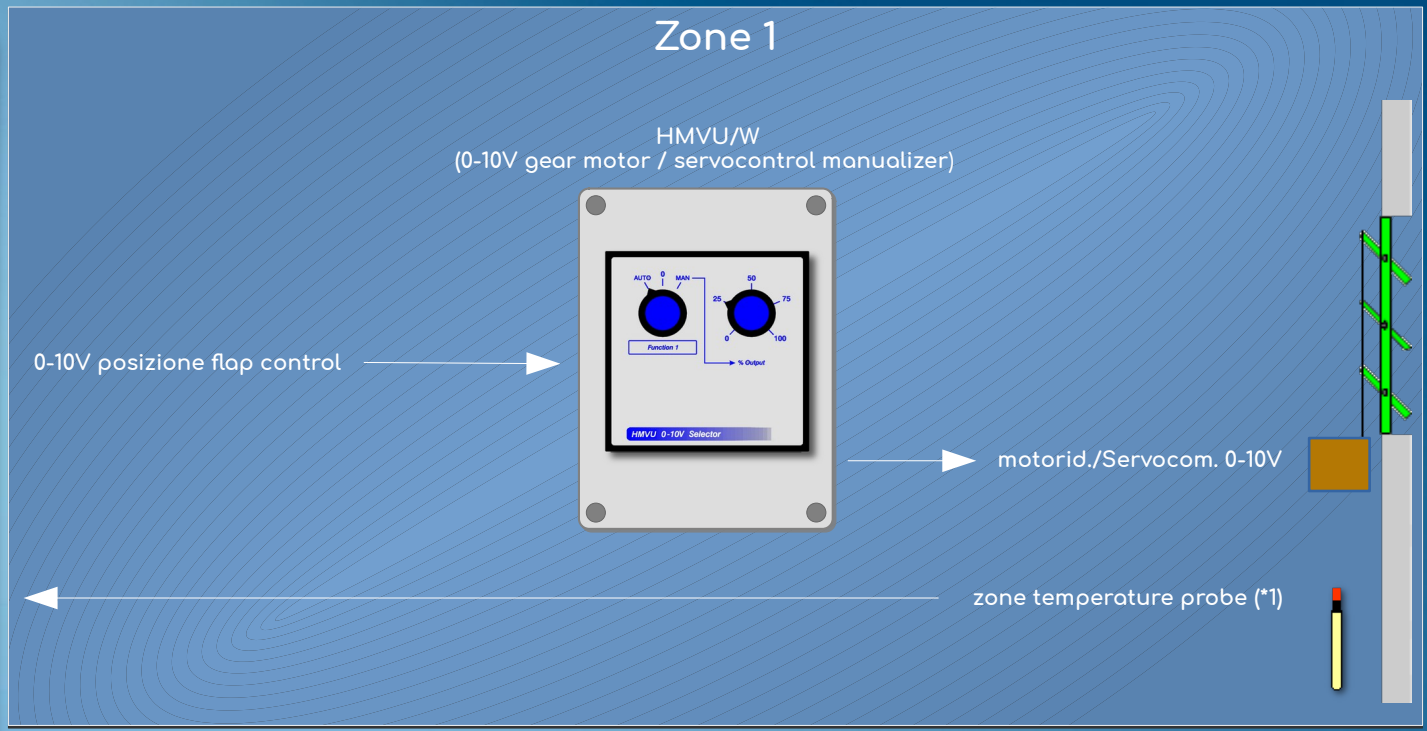
Zone 2 ... (the same)

Zone 3 ... (the same)

Zone 4 ... (the same)

* 1: Optional components depending on the type of operation of the zone chosen in the "Install" parameters.
* 2: The SX temperature probe is supplied with the FX01 control box.

0-10V gearmotor / servocontrol application diagram



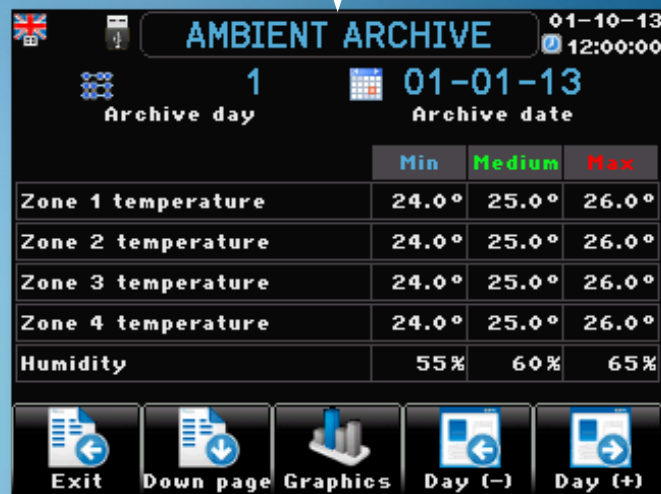
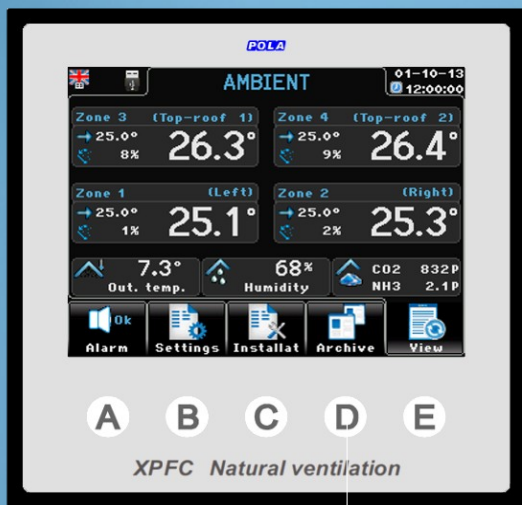
Zone 2 ... (the same)

Zone 3 ... (the same)

Zone 4 ... (the same)

* 1: The SX temperature probe must be separately ordered as an option (one for each zone to be controlled).

XPFC records all the parameters of the environment

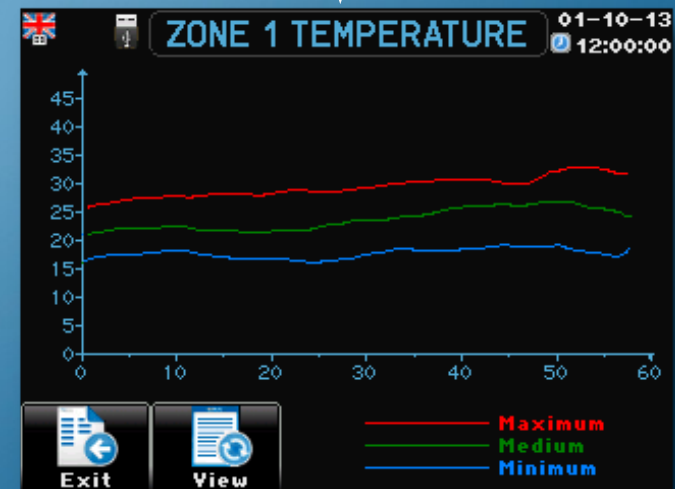


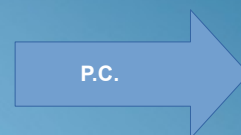
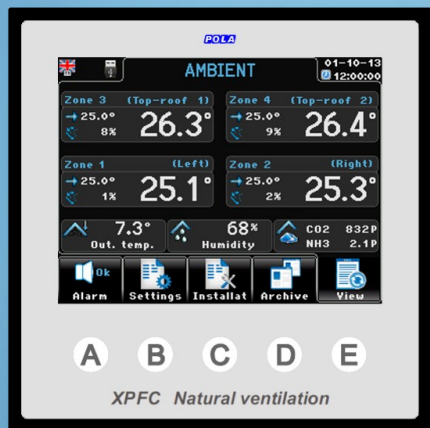
Multiple levels of registrations:

- Daily data, a recording for each day of the cycle
- Data of every single day with sampling every 15 minutes
- Full cycle data

The daily archive records the following parameters:

- Zone 1-2-3-4 temperature
- Humidity
- CO2
- NH3





The communication with the outside world is performed by USB key.

→ **Export archives**

XPFC save in the USB memory a file containing all the day by day recorded data of the cycle.

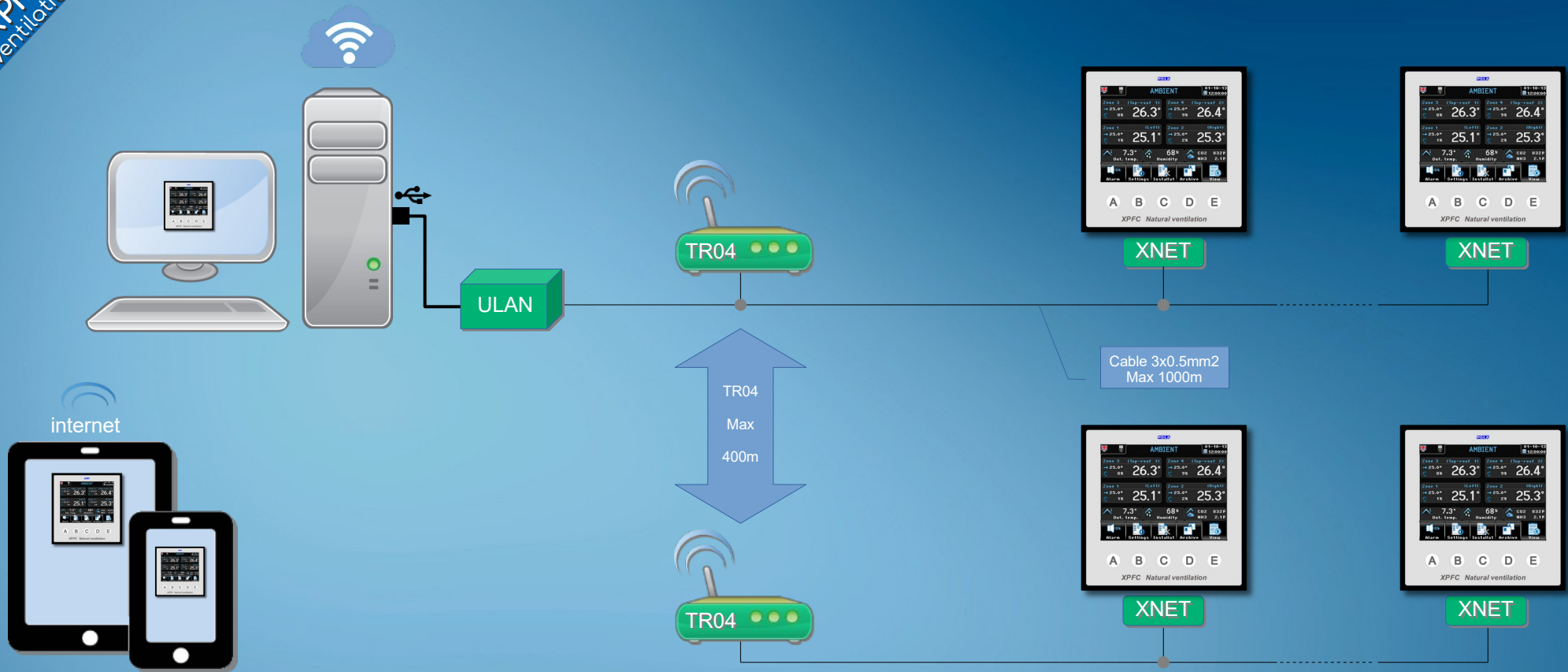
Connecting the USB key to a PC and by using the XPFC Dialogue software you can browse the recorded data in grid or graph formats.

→ **Importing / saving the setting**

You can save a file with all back-up infos on a USB file.

Saved settings can be uploaded on XPFC anytime by a user friendly procedure.

remote supervision



Remote supervision of XPFC processors grants the full management of system by PC.

The XPFC Net Pro supervision software enables the full remote control of network connected processors. ULAN peripheral is connected to PC through a USB connection. XPFC - ULAN connection is done by a simple 3 wires cable. In all cases where ULAN cannot be cabled to XPFC we can supply TR04 radio-modems with a reach of 400 mt.

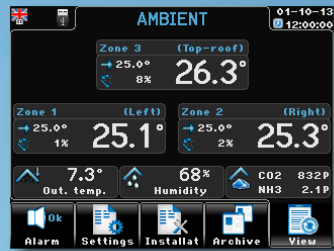
Components for creating a supervision system:

- ULAN: Network server Pc (with USB connection)
- XNET: Network adapter card (one for each XPFC)
- TR04: Radio-modem 485 (optional, to be used only when it is not possible to use the cable)

sample screenshots



view
screens



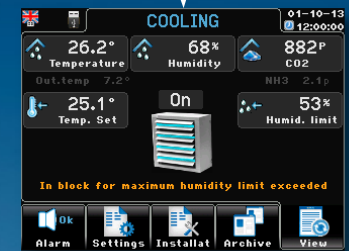
zones state
view



entilation
view



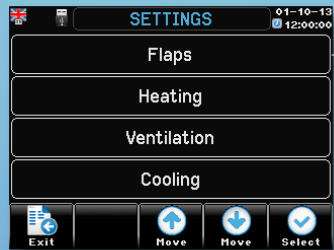
heating
view



cooling
view



setting
screens



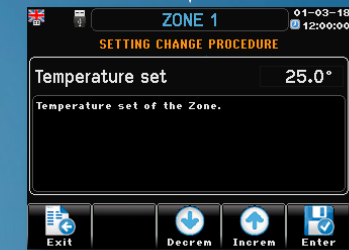
settings
selection



flap zones
selection



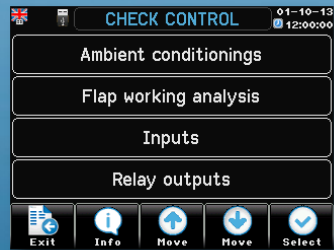
zone 1
settings



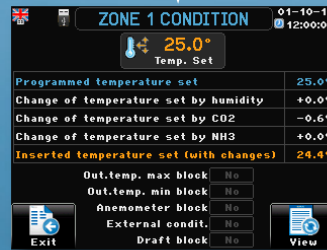
zone 1
temperature set



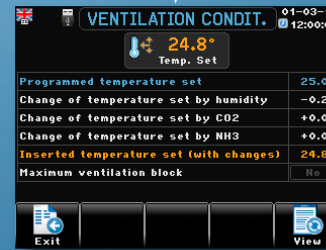
check control
screens



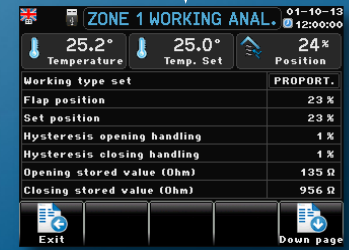
check ventilation
selection



zone 1
conditioning



ventilazione
conditioning



zone 1 flap
analysis



options available

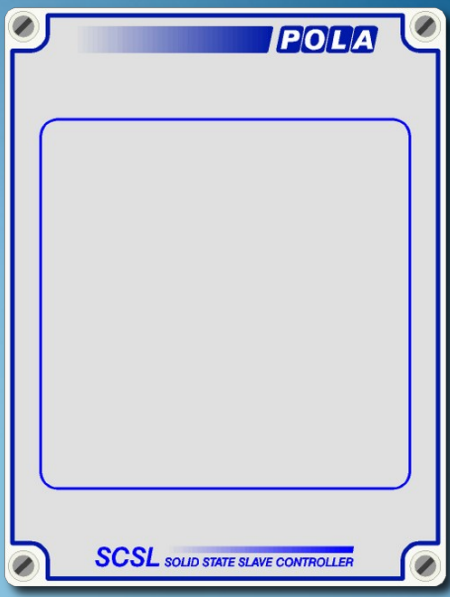
<i>Model</i>	<i>Description</i>
XPFC	Natural ventilation in an agricultural environment
----- <i>Options</i> -----	
FX01	Drive electrical box for three-phase gear-motor (specify motor power), with 1 SX temperature probe included
CSTX	Thermal trip contact (FX01 option). The intervention of the thermal shutter flap is signaled and managed by the XPFC
SX	Temperature probe. XPFC does not come with SX probes: they must be ordered separately (see option FX01)
RHR	Humidity probe 0...100%
CO2E	CO2 probe 0...10.000ppm
NH3D	Ammonia probe 0... 100ppm
HA20s	Power supply for RHR/CO2E (N° 1 HA20s for each probe)
HAR5	Power supply for NH3D
PT	Flap response potentiometer (1 KOhm)
USBP	External IP65 USB socket (to be mounted externally, to access the USB without the need to access inside of the XPFC)
SCSL	6A power extension module for continuous control of single-phase fans
HMVU/W	0-10V gear-motor / ventilation control manualizer (with IP54 box for wall mounting + gasket + transparent cover)
HP33	Two channel anemometric control
WX	Anemometric sensor for HP33 (max. 2)
W01	IP54 box for wall mounting + gasket + CXP transparent cover (option for HP33)
XNET	Network nodal point
ULAN	Network server Pc (with USB connection)
TR04	Radio-modem 485 (IP55 junction box with power supply 230/12v)

XPFC
natural
ventilation

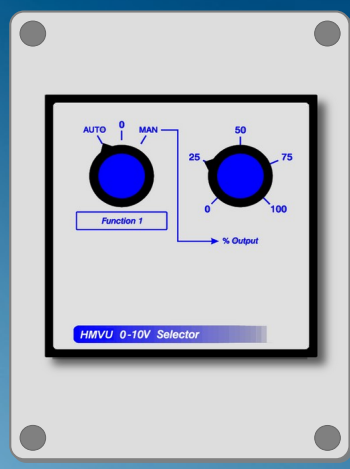
options available



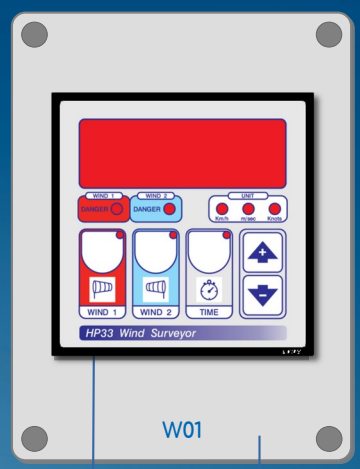
FX01



SCSL



HMVU/W



HP33

W01



SX



RHR



CO2E



NH3D



WX



PT



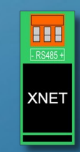
HA20s



HAR5



ULAN



XNET



USBP



TR04

POLA

www.pola.it

40th

40 YEARS OF INNOVATION