XP line
small size, great power

POLA

VENTILATION

01-03-18
12:00:00

24.8°
Temperature

62%
Humidity

Step 1   Step 2   Step 3   Step 4   Step 5

25.0°
Temp. Set

0
Active step

On-3 3:20
Air exchange

Ok
Alarm

Settings

Installat

Archive

1   3
View

A   B   C   D   E

XP66 Ventilation control

XP66   ventilation control

POLA

XP66
ventilation

The main feature of the XP66 is the color display screen (3.5") with 320x240 dots resolution with led backlighting. **XP61** is made in DIN 96x96 format and the module dimensions are 96x96mm.
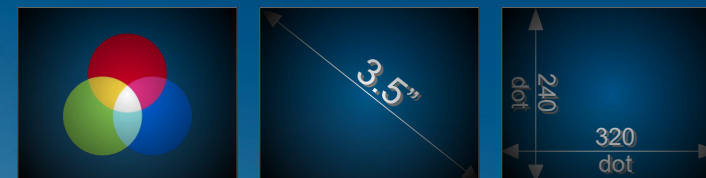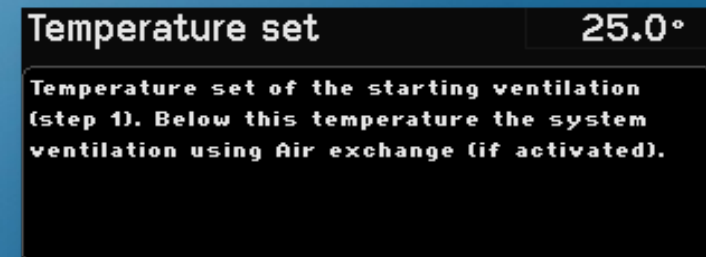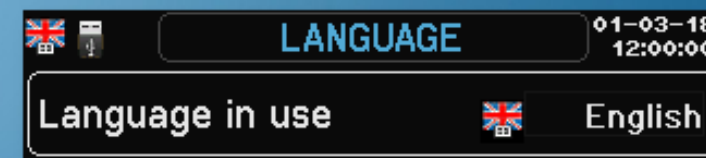

The user interface is easy and friendly.
The easy touch screen system gives both the typical "easy to use" approach of a touch screen system and the strength and mechanical protection of a polycarbonate IP54 keyboard.

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

Alarm	Settings	Installat	Archive	Check
A	B	C	D	E

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

LANGUAGE 01-03-18 12:00:00

Language in use   English

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

Temperature set   **25.0°**

Temperature set of the starting ventilation (step 1). Below this temperature the system ventilation using Air exchange (if activated).

Ventilation control

XP66 Ventilation control

XP66 controls 5 steps on-off ventilation. Also it features one 0-10V output to control fans by inverter.

The temperature probe controls the parameters of Ventilation, Flaps, Heating system, Cooling system and Alarm.
XP66 can also be connected to the %RH probe (to operate the Cooling system) and to the Depressiometer (to operate flaps).
Flaps can also be set to work according to indoor temperature (Proportional or Floating Mode) or according to ventilation step (Associative Mode).
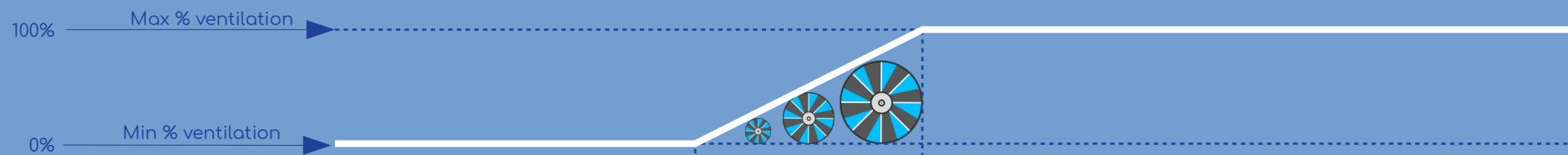
The daily archive records the following parameters :

- Min-Average-Max Indoor Temperature
- Min-Average-Max Indoor %RH
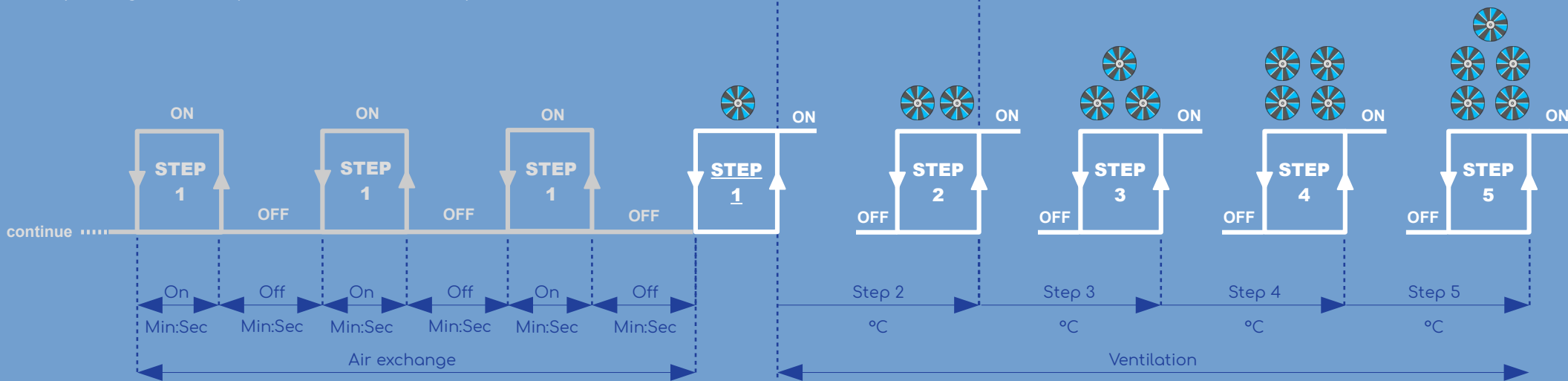- Heating system working time

In the archive are also stored the total working time of the cycle (working hours of Ventilation and Heating Systems)

Ventilation operating diagram

XP66 ventilation

Continuous regulation (ventilation 0-10V)

100% — Max % ventilation

0% — Min % ventilation

Steps regulation (ventilation Off-On)

ON	ON	ON	ON	ON	ON	ON	ON
STEP 1	STEP 1	STEP 1	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

continue

On — Min:Sec   Off — Min:Sec   On — Min:Sec   Off — Min:Sec   On — Min:Sec   Off — Min:Sec

Step 2 °C   Step 3 °C   Step 4 °C   Step 5 °C

Air exchange

Ventilation

Temperature set

Ambient temperature

Heating / Cooling / Alarm operating diagram

Heating

Temperature differential

ON

OFF

Heating temperature set

Cooling

ON conditioned by the maximum humidity block if present (if present humidity probe)

Temperature differential

ON   ON   ON

OFF   OFF   OFF

Timing band

Cooling temperature set
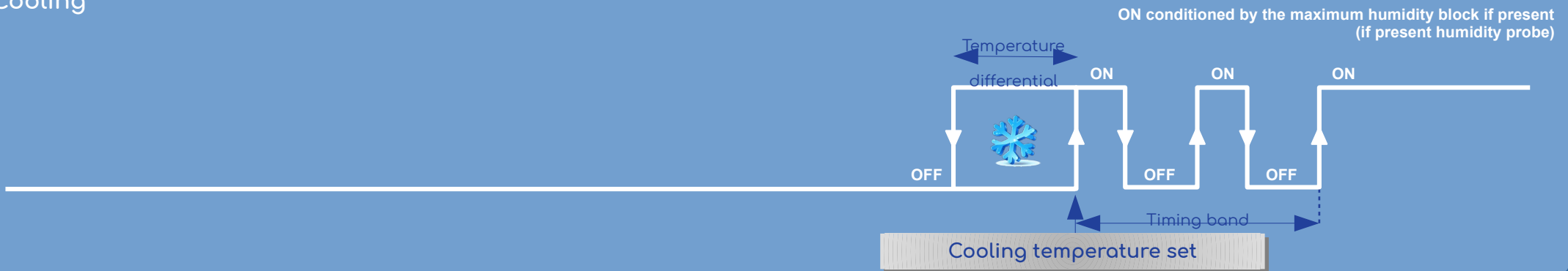
Temperature alarm (same for humidity / pressure)

0.2°   0.2°

ON   ON

OFF   OFF

Minimum temperature alarm set

Maximum temperature alarm set

Ambient temperature

XP66 ventilation

Inputs and outputs

XP66 ventilation

Inputs:
- Temperature probe
- Humidity probe
- Pressure probe
- Potentiometer

INPUTS

Screen display:

POLA

VENTILATION   01-03-18
                12:00:00

24.8° Temperature   62% Humidity

Step 1   Step 2   Step 3   Step 4   Step 5

25.0° Temp. Set | 0 Active step | On-3 3:20 Air exchange

Alarm   Settings   Installat   Archive   View

A   B   C   D   E

XP66 Ventilation control

OUTPUTS

Outputs:
- Ventilation (relay 1-2-3-4-5)
- Ventilation (0-10V output)
- HDY6 outputs (optional slot)
- Heating
- Flap
- Cooling
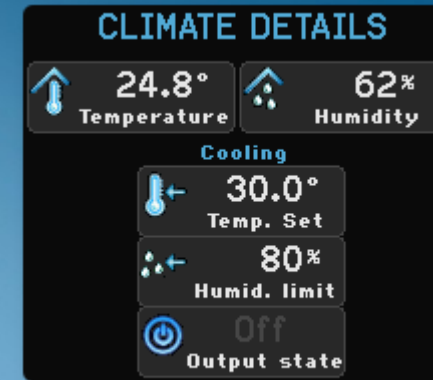- Watch-dog
- Alarm

Other available connections

➔ **USB plug**
XP66 has a USB plug on the back.
When selecting the **USBP** option you can get a USB plug with a (IP65) protection cap externally mounted so you can access the USB without having to go to the back of the unit.

➔ **XNET**
Network connection card (optional) for **XP66** processor (see remote supervision).

Temperature / humidity sensors combination

XP66 ventilation

Only Temperature control

CLIMATE DETAILS

↑ 24.8° Temperature

Cooling

↓ 30.0° Temp. Set

⏻ Off Output state
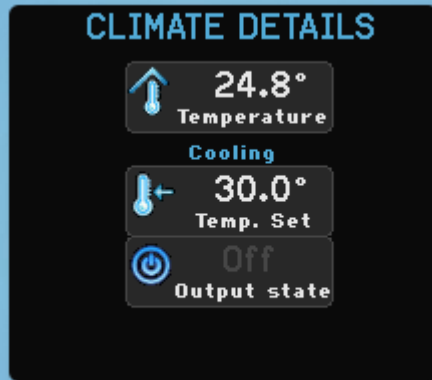
Temperature & Humidity control

CLIMATE DETAILS

↑ 24.8° Temperature   🌧 62% Humidity

Cooling

↓ 30.0° Temp. Set

💧 80% Humid. limit

⏻ Off Output state

Option to order

SX

Temperature probe

Option to order

WT1s

Psycrometric kit dry and wet bulb

Or

SX

Temperature probe

+

RHR + HA20s

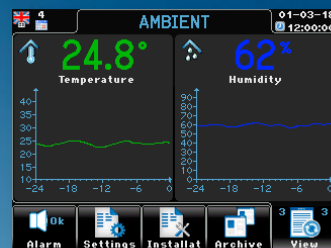0...100% humidity probe + Power supply

Sample screenshots

Viewing screens

VENTILATION — 01-03-18 12:00:00
24.8° Temperature — 62% Humidity
Step 1 Step 2 Step 3 Step 4 Step 5
25.0° Temp. Set — 0 Active step — On-3 3:20 Air exchange
Alarm — Settings — Installat — Archive — View

Viewing operating condition

CLIMATE DETAILS — 01-03-18 12:00:00
24.8° Temperature — 62% Humidity
Heating — Cooling — Flap
20.0° Temp. Set — 30.0° Temp. Set — 20P Press. Set
Off Output state — 85% Humid. limit — 21P Pressure
Off Output state — Off Output state
Alarm — Settings — Installat — Archive — View

Viewing operating condition

AMBIENT — 01-03-18 12:00:00
24.8° Temperature — 62% Humidity
Alarm — Settings — Installat — Archive — View

Viewing operating condition

RELAY OUTPUTS STATE — 01-03-18 12:00:00
Ventilation step 1 command — On
Ventilation step 2 command — On
Ventilation step 3 command — On
Ventilation step 4 command — Off
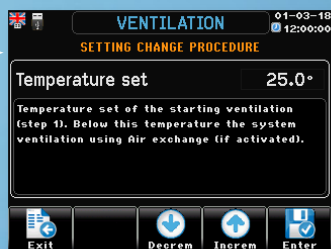Ventilation step 5 command — Off
Exit — Down page

Output state

Settings screens

SETTINGS — 01-03-18 12:00:00
Ventilation
Air exchange
Heating
Cooling
Exit — Move — Move — Select

Settings selection

VENTILATION — SETTING CHANGE PROCEDURE — 01-03-18 12:00:00
Temperature set — 25.0°
Temperature set of the starting ventilation (step 1). Below this temperature the system ventilation using Air exchange (if activated).
Exit — Decrem — Increm — Enter

Ventilation temperature setting

AIR EXCHANGE — SETTING CHANGE PROCEDURE — 01-03-18 12:00:00
On time of air exchange — 4:10 min:sec
On time of air exchange.
Exit — Decrem — Increm — Enter

On time air exchange setting

HEATING — SETTING CHANGE PROCEDURE — 01-03-18 12:00:00
Temperature set — 25.0°
Temperature set of the heating system. Below this temperature the Heating is on.
Exit — Decrem — Increm — Enter
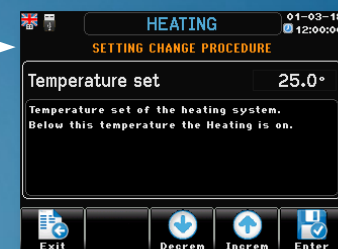
Heating temperature setting

Archive screen

ARCHIVE — 01-03-18 12:00:00
Climate
Cycle total
Alarms
Events
Exit — Move — Move — Select

Archives to display selection

ARCHIVE — 01-03-18 12:00:00
4 Archive day — 01-03-18 Archive date
	Min	Medium	Max
Ambient temperature	23.2°	24.8°	25.6°
Ambient humidity	56%	63%	78%
Heating working time			328'
Exit — Graphics — Daily reg. — Day (-) — Day (+)
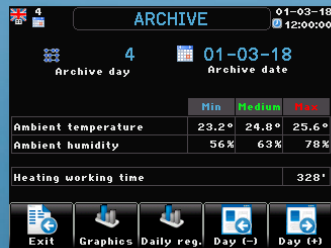
Cycle temperature archive

CYCLE TEMPERATURE — 01-03-18 12:00:00
Exit — Humidity

Cycle temperature chart
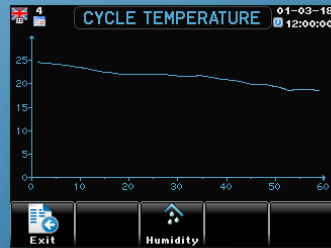
CYCLE TOTAL — 01-03-18 12:00:00
Working hours
Ventilation relay 1	232hr
Ventilation relay 2	211hr
Ventilation relay 3	189hr
Ventilation relay 4	56hr
Ventilation relay 5	50hr
Heating	89hr
Exit

Total cycle archive

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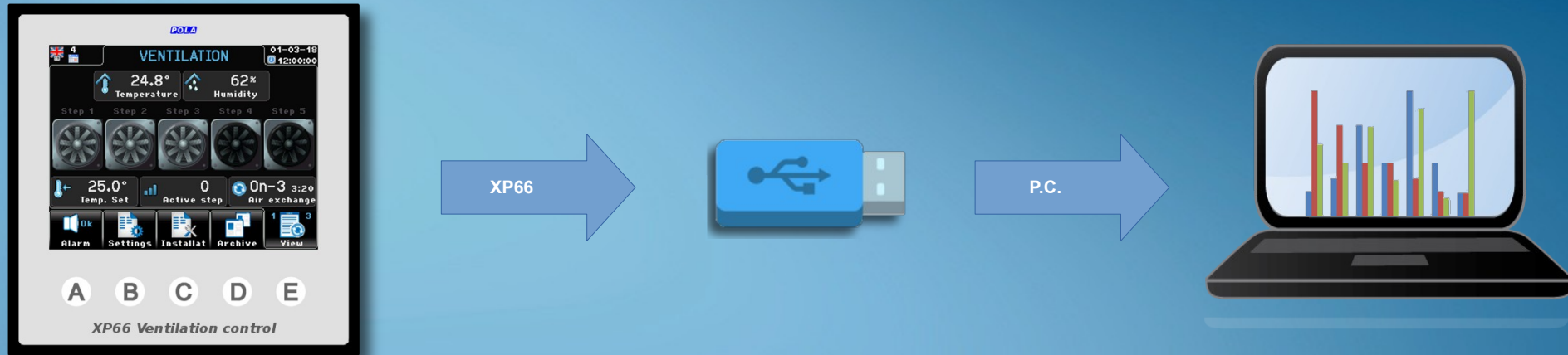
The communication with the outside world is performed by USB key.

➜ **Export archives**
XP66 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 **XP66 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 **XP66** anytime by a user friendly procedure.

Remote supervision

TR04

ULAN

TR04

XNET

XNET

Cable 3x0.5mm2
Max 1000m

internet

TR04

Max

400m

TR04

XNET

XNET
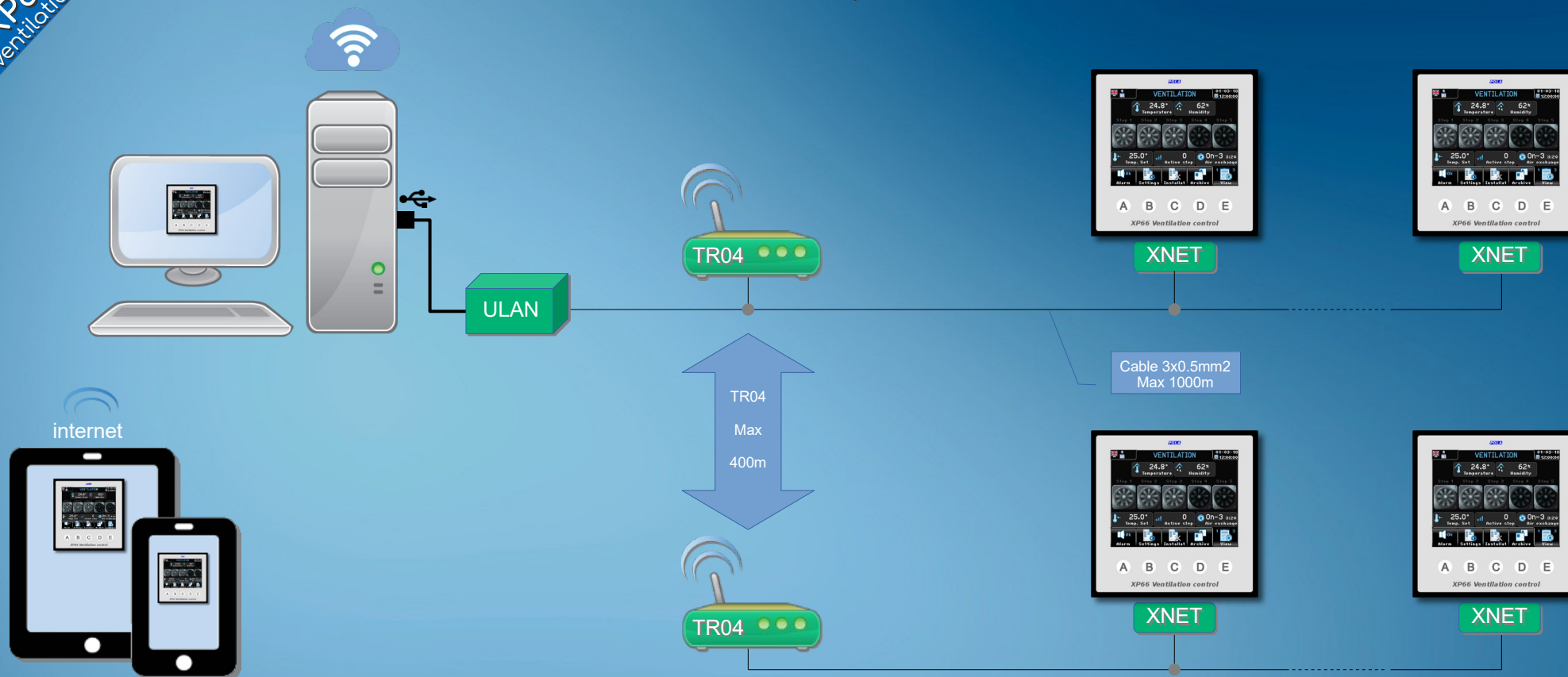
Remote supervision of **XP66** processors grants the full management of system by PC.

The **XP66 Net Pro** supervision software enables the full remote control of network connected processors.
ULAN peripheral is connected to PC through a USB connection. XP66 – **ULAN** connection is done by a simple 3 wires cable.
In all cases where **ULAN** cannot be cabled to **XP66** 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 XP66)
➔ **TR04**: Radio-modem 485 (optional, to be used only when it is not possible to use the cable)

Available options

| Model	Description
XP66	Ventilation control (DIN96 panel mounting)
-- *Options* --	
SX	Temperature probe
WT1s	Psycrometric kit to control the ambient %RH. Includes the SX temperature sensor (so no need to order an extra SX when the WT1s kit is installed)
W01	IP54 box for wall mounting + gasket + transparent cover
USBP	USB IP65 external plug (to be mounted externally, for access to the USB without the need to access the back of the XP66)
HDY6	Relays extension slot
RHR	0...100% humidity probe
HA20s	Power pack for RHR humidity probe
DP59/W	Air pressure transmitter
PT	Flap feedback potentiometer
HMVU/W	0-10V ventilation control manualizer
HMVU/W	0-10V ventilation control manualizer (with IP54 box for wall mounting + gasket + transparent cover)
HP29	Independent alarm temperature/pressure/watch dog
XNET	Network nodal point
ULAN	Network server Pc (with USB connection)
TR04	Radio-modem 485 (IP55 junction box with power supply 230/12v)

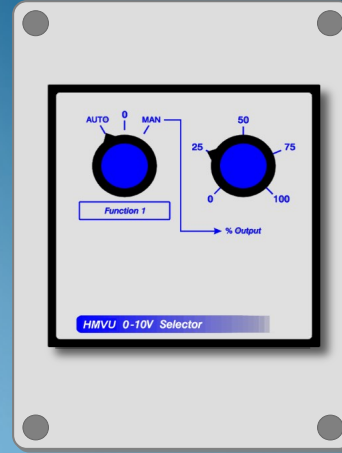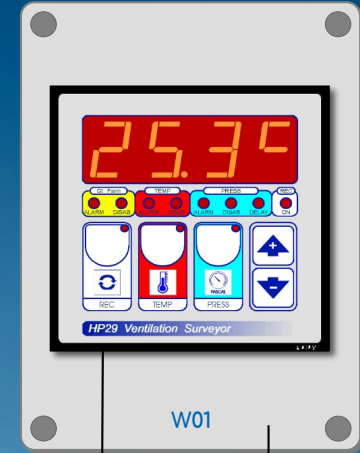Images

XP66 ventilation

Available options
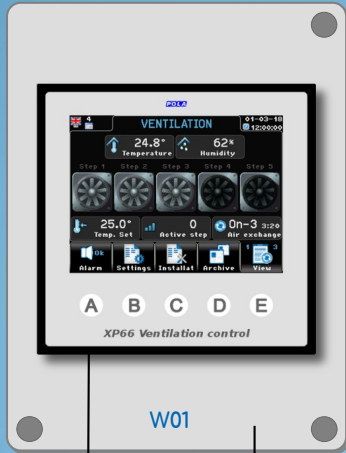
XP66   W01

W01
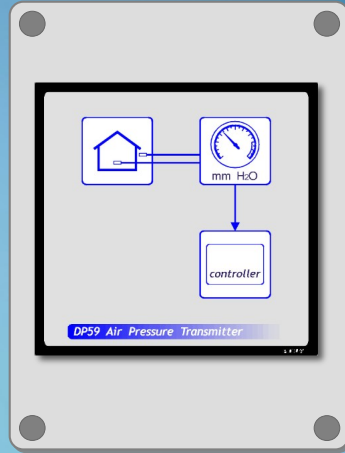
DP59/W

HMVU/W

HP29   W01

W01

SX

WT1s

RHR
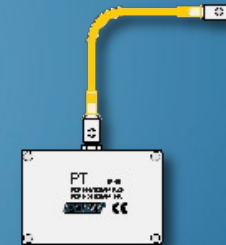
PT
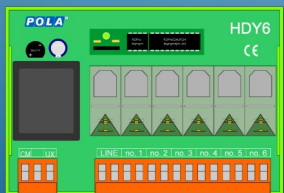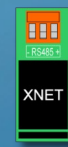
HDY6

HA20s

ULAN

XNET

USBP

TR04

POLA

www.pola.it

40th

40 YEARS OF INNOVATION