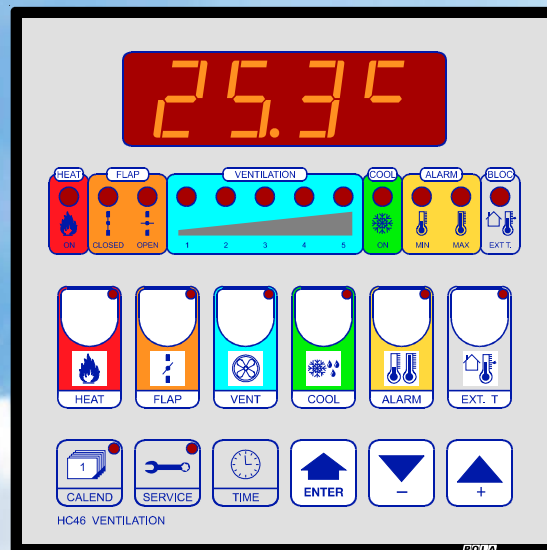
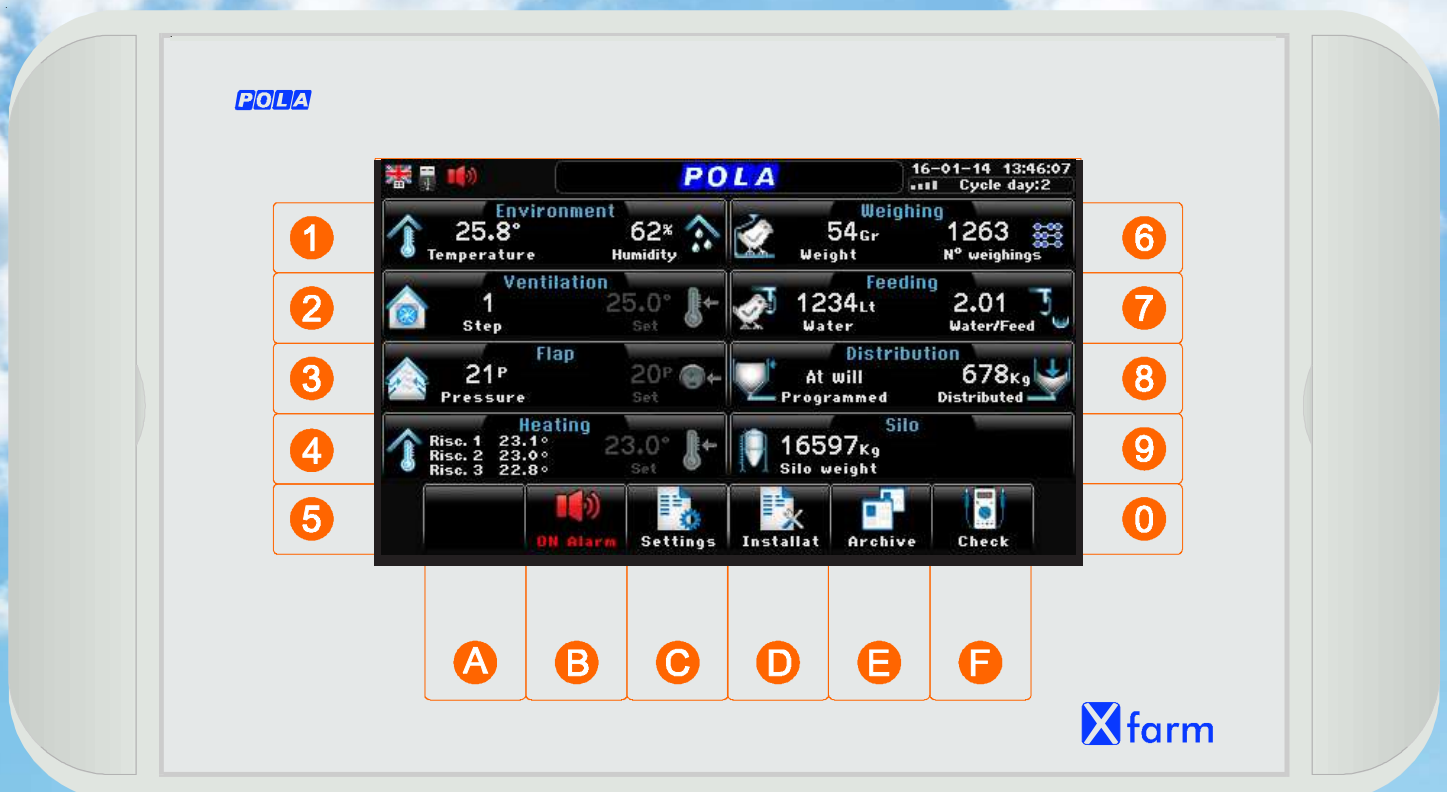


from HC46

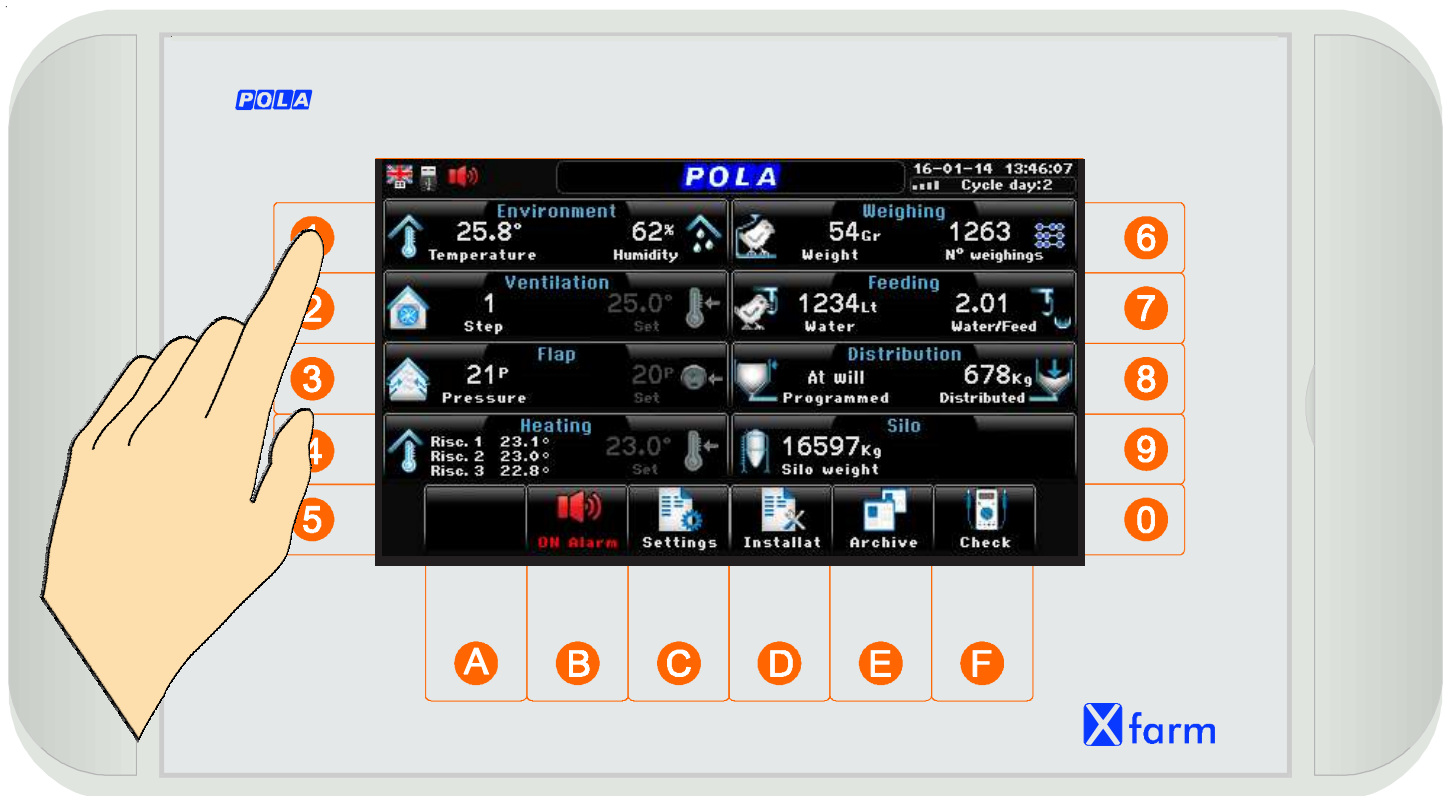


to Xfarm



the evolution of the species

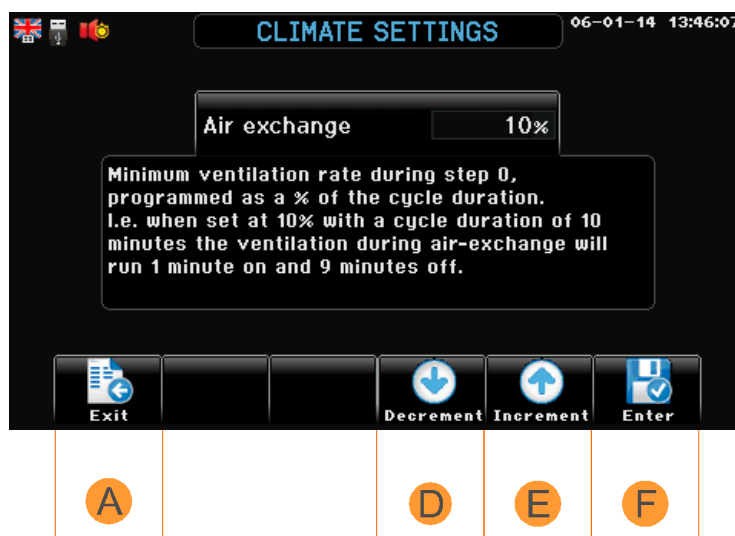
Xfarm has a user friendly program



Actual size: 200x110mm

The main feature of the Xfarm is the color display screen (4.3") with WQVGA 480x272 dots resolution with led backlighting.

The user interface is easy and friendly. The **easy touch** screen systems gives both the typical "easy to use" approach of a touch screen system and the strength and mechanical protection of a polycarbonate IP65 keyboard.



At every screen the function keys display a different graphic making the program very user friendly. Each programming step has its own help screen so the program has a "built in" instruction manual.

Data transfer

Communication with external world is by USB pen drive.

The main programming parameters, the archive downloads and software updates can be made by PC connection via the USB pen drive.



Network connection



Climate configuration

By setting a few parameters in "Climate configuration" you can choose between several types of typical climate control systems.

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps	3	Ventilation probe	2
Summer steps	7	Flap 1 control	Depress
Winter ventilat. off	No	Flap 2 control	Depress
Speed regulation	0-10 Volt	Flap 1 in summer	Open 2

Exit Down page

CLIMATE CONFIGURATION 01-01-14 13:46:07

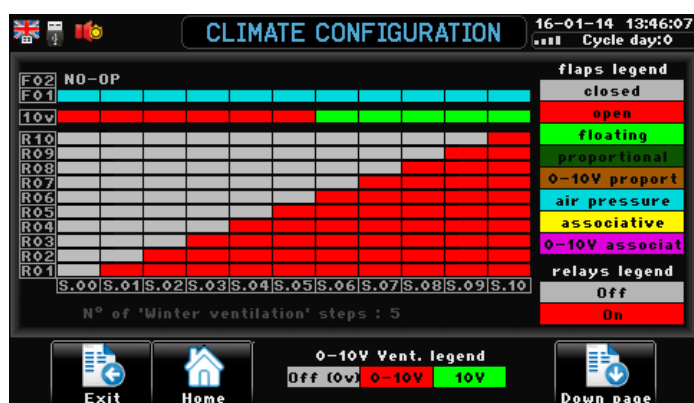
Flap 1 temp. probe	Ventilation	Outdoor temp. probe	Yes
Flap 2 temp. probe	Ventilation	CO2 probe	Yes
Heating	3 Heaters	NH3 probe	Yes
Humidity probe	Psycrom	External alarm	Yes

Exit Up page

16 inputs - 24 on-off outputs and 3 0-10V outputs can be assigned to climate control:

- 10 x On-Off ventilation Steps with Winter-Summer ventilation mode
- 0-10V ventilation by inverter
- 2 x flaps (air inlets) working either by static pressure or Associative or Proportional or Natural mode
- 3 Heaters
- 1 Cooling.

Xfarm displays the climate control configuration according to what programmed in the "Climate Configuration" section.



CLIMATE CONFIGURATION 16-01-14 13:46:07 Cycle day:0

Winter steps	5	Flap 1 temp. probe	Ventilation
Summer steps	5	Flap 2 temp. probe	Ventilation
Winter ventilat. off	No	Heating	3
Speed regulation	0-10 Volt	Humidity probe	Psycrom
Ventilation probe	1	Outdoor temp. probe	Yes
Flap 1 control	Depress	CO2 probe	Yes
Flap 2 control	No-op	NH3 probe	Yes
Flap 1 in summer	Depress	External alarm	Yes

Up page

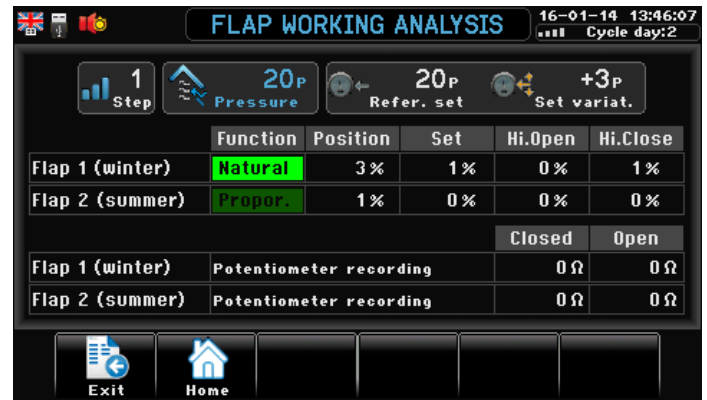
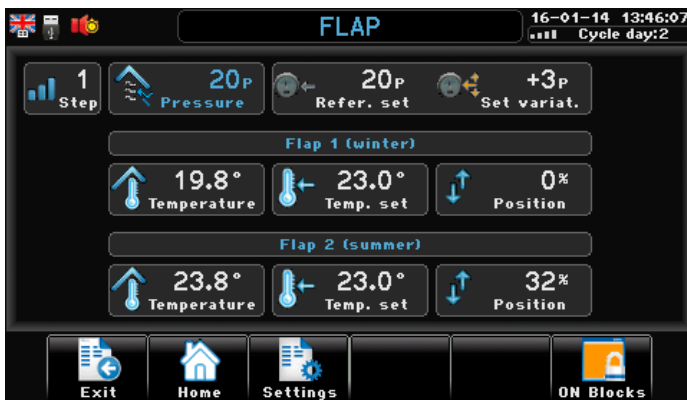
Xfarm can manage ventilation control



Up to 10 x independent and fully configurable ventilation steps according to following typical options:

- On / Off
- Fan speed control by transformer
- Proportional by 0 -10 V for triac / inverter speed control
- Or a combinations of the three systems above.

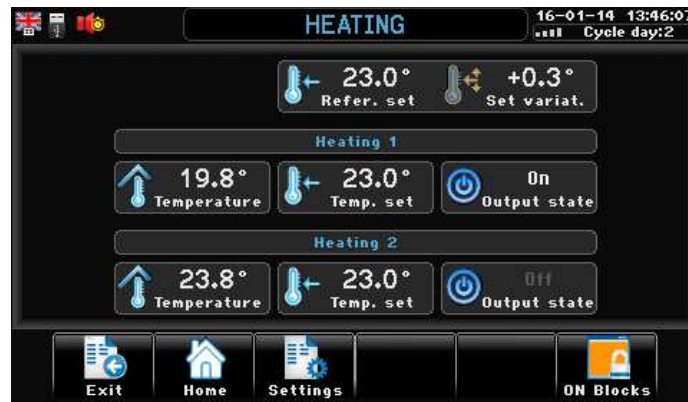
Xfarm can manage air faps control



Flaps

- Up to 2 independent flaps (air inlets) working either by static pressure by Depressiometer or Associative or Proportional or Natural mode (by 0-10V or by feedback potentiometer).

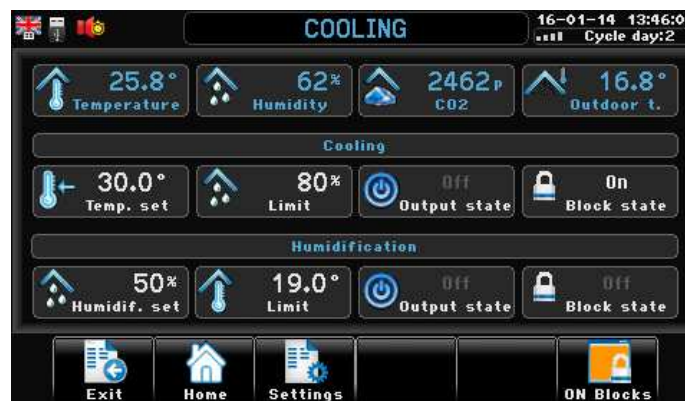
Xfarm can manage heating control



Heating

3 ON-OFF or 0-10V heaters with independent temperature probe.

Xfarm can manage cooling and humidification control



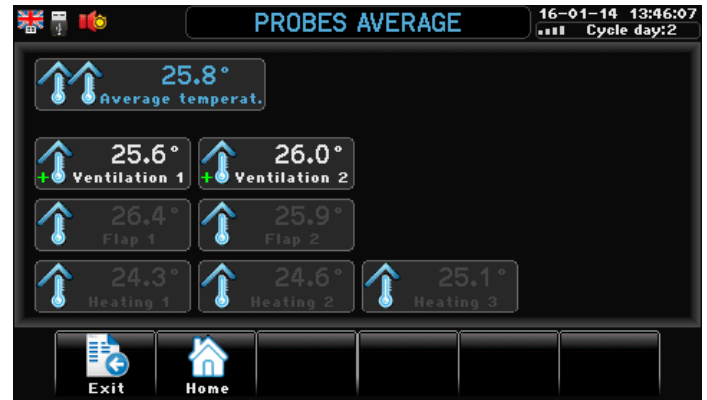
Cooling

Controls of cooling system by temperature and % RH.

Humidification

Humidification according to temperature and % RH.

Xfarm can manage environmental control



Average temperature value

Up to 2 probes can be connected to measure the indoor ventilation temperature. These probes, along with the heating and the flaps probes can be connected to create an "average" temperature value as a mix of the temperatures as recorded by the above probes.

Humidity probe

The %RH probe affects Ventilation, Cooling and Humidification systems.

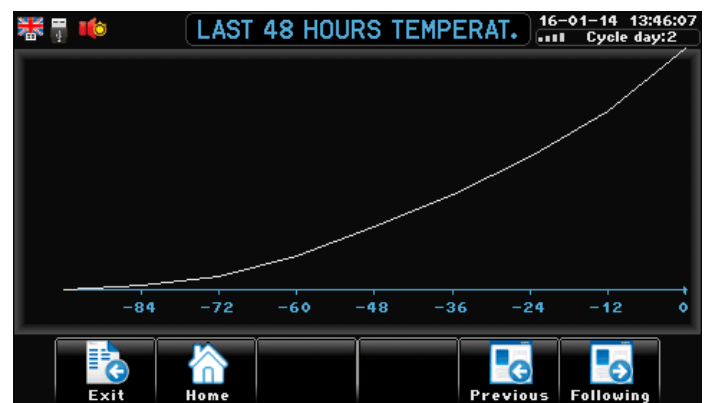
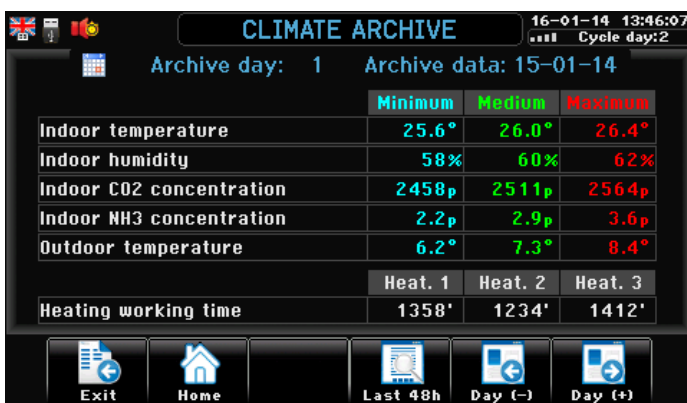
CO2 - NH3 probe

CO2 and NH3 probes affect Ventilation systems.

Calendar

Heating and ventilation options can be set to run automatically according to the day of the batch.

Xfarm store in archives all the data of the cycle

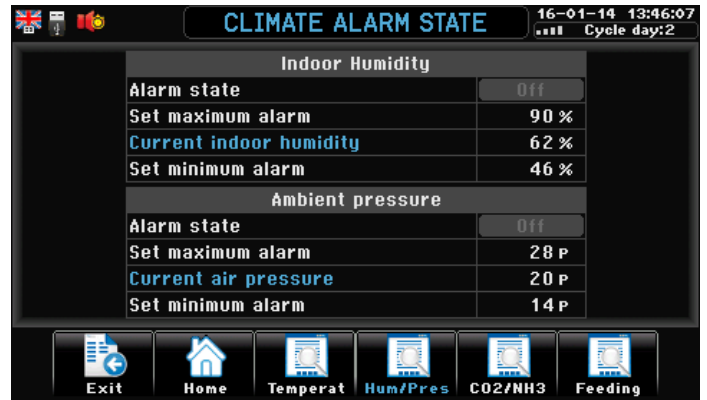
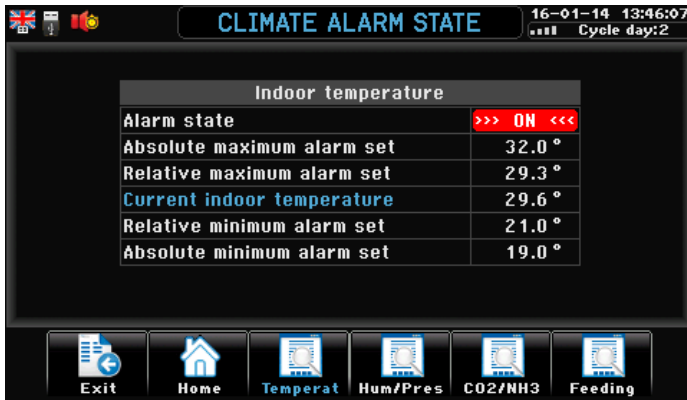


Archive

In the Archive are recorded:

- daily values of internal and external temperature
- daily working time of heaters
- total working times from cycle start-up.

Xfarm can manage alarm control



Alarms

Temperature, humidity, air-pressure, CO2-NH3, recording all the alarm events (including alarm exclusions).

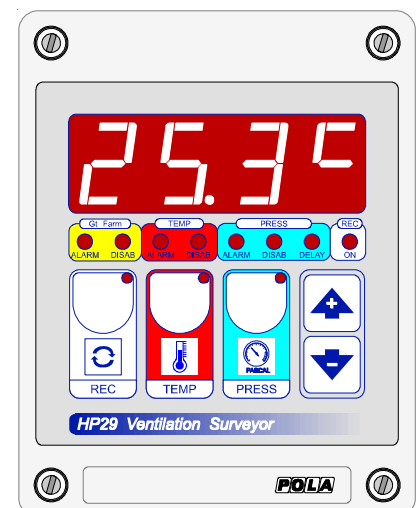
Xfarm archives all alarms triggered during current cycle



HP29/W independent alarm

Independent ventilation alarm unit which is a supplementary source of the following alarm:

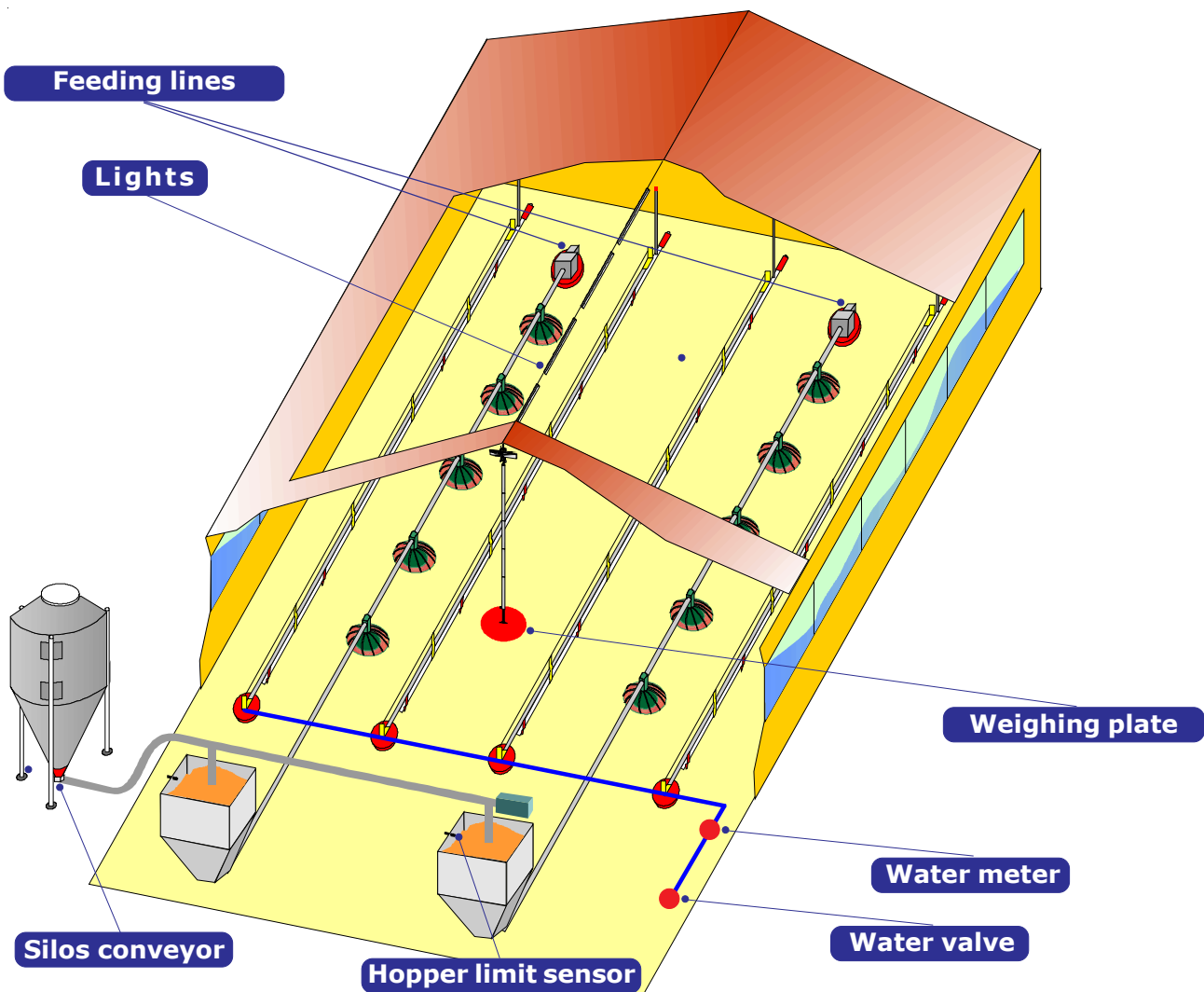
- Minimum and maximum temperature.
- Minimum and maximum air-pressure.
- Check of Xfarm correct functions by a signal sent every 6 min (watchdog).



Feeding configuration

Xfarm takes the control of:

- 1 Silo with load cells or without load cells (volumetric system)
- 1 Birds weigher
- Water supply
- Lights (either working in on-off mode or by 0-10V regulation).



Feed management can be done either by the silos load cells, or by volumetric system (when silos have no load cells) by converting the auger working time into Kg, or by an external weighing system (i.e. a mechanical weigher).

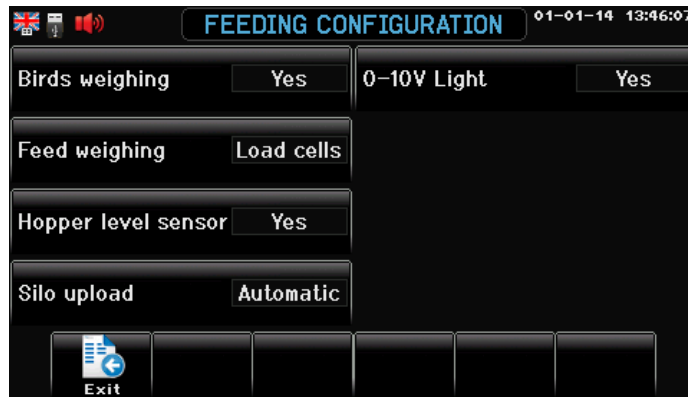
Feed distribution can be done in this mode:

- **Unlimited**. NO limit of weight and time. **Xfarm** manages the feed distribution, and then keeps a record of it into the Archive.
- **Fixed meal**. At a preset time **Xfarm** supplies the programmed quantity of feed, and then keeps a record of it into the Archive.

farm can manage feeding control

Feeding configuration

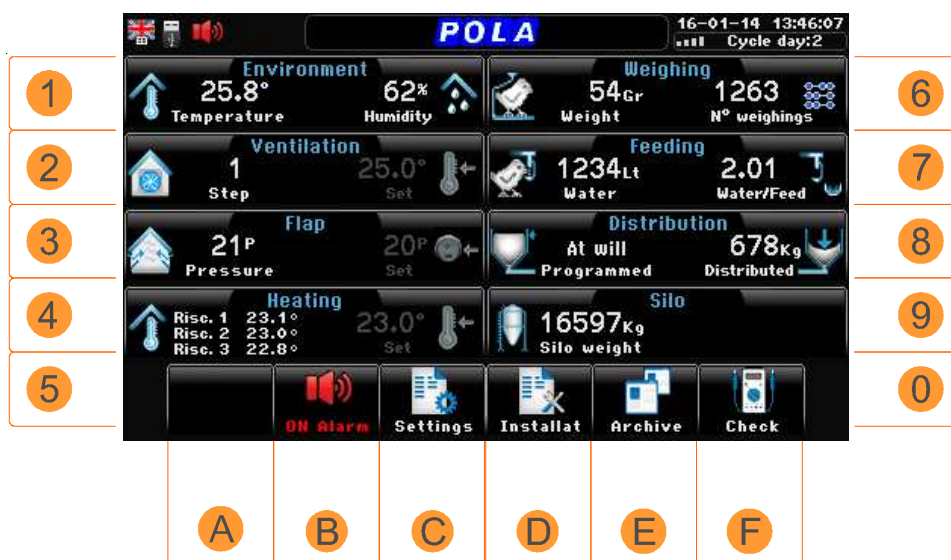
By setting a few parameters in "Feeding configuration" you can choose between several types of typical feeding control systems.



8 inputs - 6 on-off outputs and 1 0-10V outputs can be assigned to climate control:

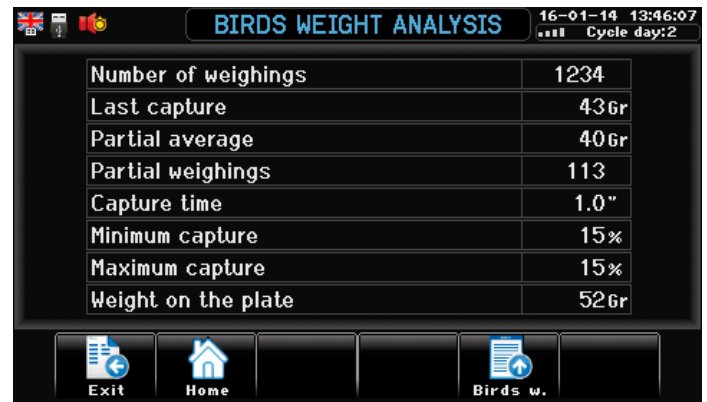
- 1 Silo with load cells or without load cells (volumetric system)
- 1 Birds weigher
- Water supply
- Lights (either working in on-off mode or by 0-10V regulation).

When activated all Feeding parameters are displayed on main screenshot.



Only if **Feeding** is active.

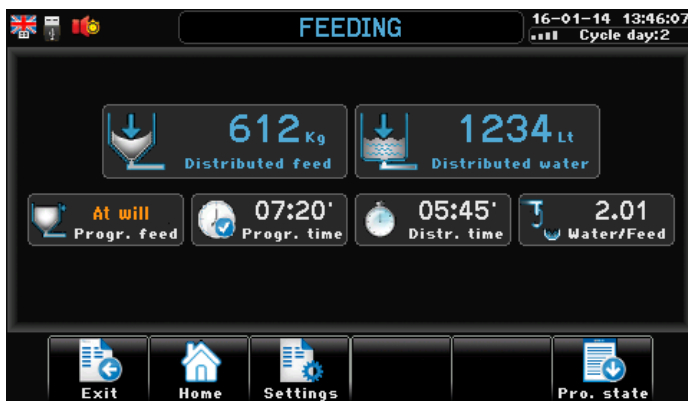
Xfarm can manage Birds weighing control



Birds weighing

Bird weighing is performed by weigher plate.

Xfarm can manage feeding control



Feed

Feed management can be done either by the silos load cells, or by volumetric system (when silos have no load cells) by converting the auger working time into Kg, or by an external weighing system (i.e. a mechanical weigher).

Water management

Water distribution is programmable at preset times and consumption is recorded by the water meter. Water level is kept under constant control to prevent problems.

Lights

Lights can control by On/off output and with dawn/sunset 0-10V output.

Xfarm can manage Silo control



Silo weighing

Detection and recording of feed consumption done by load cells.
Automatic detection of silo uploading.

Xfarm can manage cycle control



Archive

Daily and total cycle data are all stored into the Archive.

Silos weighing: How to control the feed weight. By load cell system or by volumetric ?

Load cells System

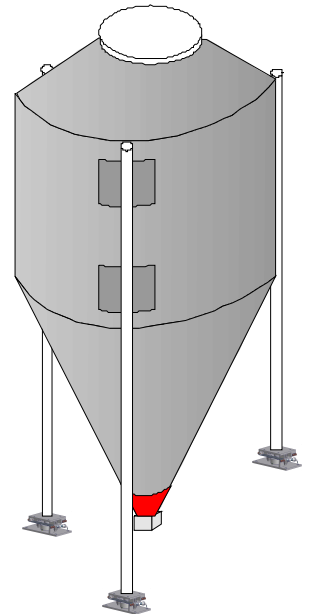
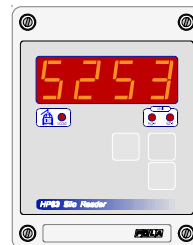
This system makes a direct measurement of feed contained in the silos by the load cell which are located under each silos leg.

Advantages:

- Total quantity of feed in the silos can be displayed weighing measurement is very accurate Alarm "Stock/meals" can be activated.
- An outdoor silo weigh display repeater (**HP63/W**) can be connect to **Xfarm** to always keep an eye on Silo Kg content.

Disadvantages

- Load cells installation is required.



Volumetric system

This systems allows the feed weight control by counting the working time of the silos auger and converting it in Kg of feed.

This requires a calibration procedure (to be run every time the feed density is different from previous supplies):

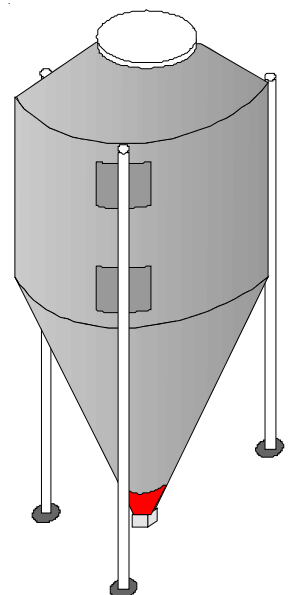
Xfarm runs the auger by 30 sec then check how many Kg were downloaded and convert the feed/time ration into a "K" factor.

Advantages:

- No load cells are required.

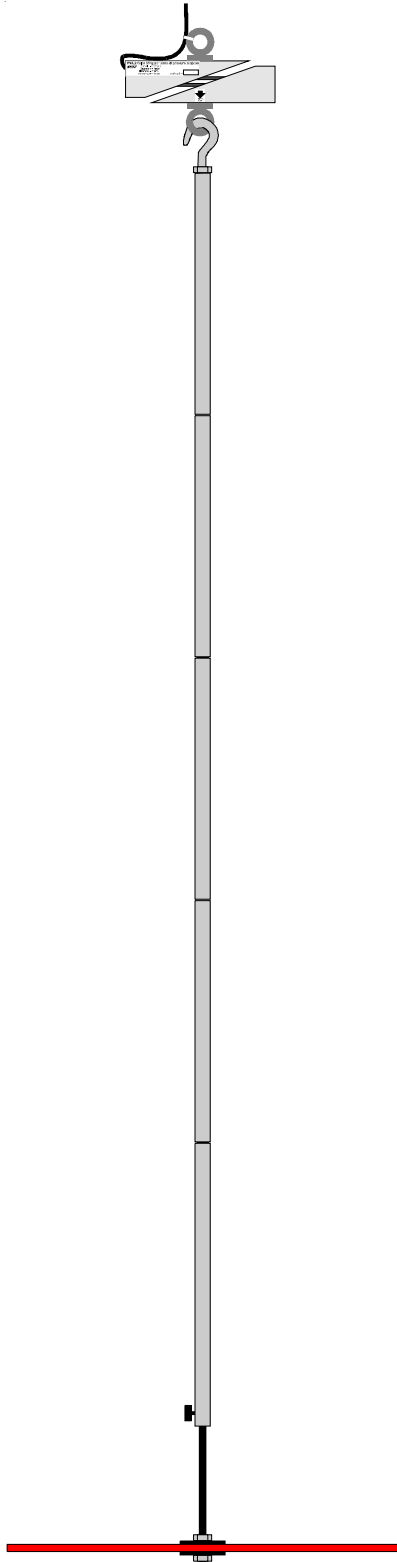
Disadvantages

- The accuracy of system depends on the accuracy of calibration and K factor.
- The alarm "Stock/meals" (how many meals are contained in the silos) cannot be activated.



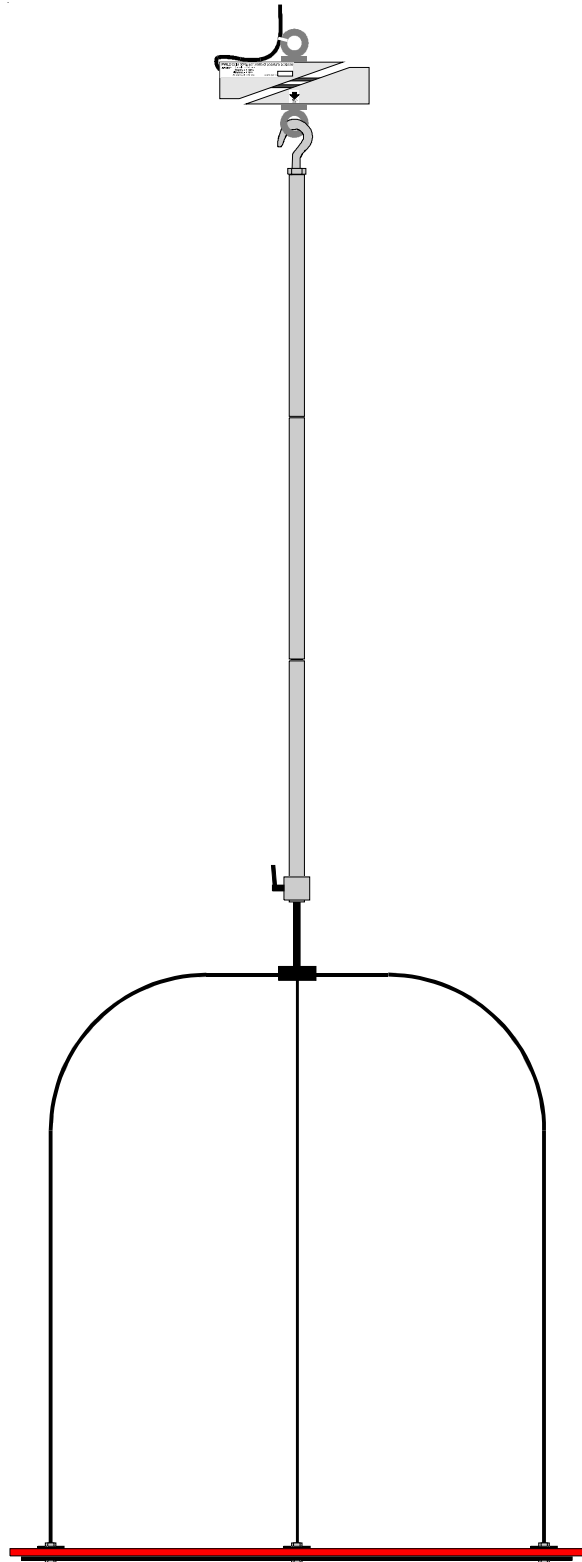
Chicken weighing plate

PWS1s plate for chicks
Plate diameter= 76 cm
Lenght= 320 cm
Insulation= IP56



Turkeys weighing plate

PWS2 plate for turkeys
Plate diameter= 98cm
Lenght= 380 cm
Insulation= IP56



Examples of some typical configurations on Xfarm

EXAMPLE 1

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps 3 Ventilation probe 1

Summer steps 7 Flap 1 control Depress

Winter ventilat. off No Flap 2 control Depress

Speed regulation No Flap 1 in summer Closed

Exit Down page

Flap 2	Closed	Closed	Closed	Closed	Depress	Depress	Depress	Depress	Depress	Depress	Depress
Flap 1	Depress	Depress	Depress	Depress	Closed	Closed	Closed	Closed	Closed	Closed	Closed

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 3	Off	Off	Off	On	On	On	On	On	On	On	On
Relay 2	Off	Off	On	On	On	On	On	On	On	On	On
Relay 1	Exchange	On	On	On	On	On	On	On	On	On	On



EXAMPLE 2

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps 3 Ventilation probe 1

Summer steps 7 Flap 1 control Depress

Winter ventilat. off Yes Flap 2 control Depress

Speed regulation No Flap 1 in summer Open 1

Exit Down page

Flap 2	Closed	Closed	Closed	Closed	Depress	Depress	Depress	Depress	Depress	Depress	Depress
Flap 1	Depress	Depress	Depress	Depress	Open 1	Closed	Closed	Closed	Closed	Closed	Closed

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 3	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off
Relay 2	Off	Off	On	On	Off	Off	Off	Off	Off	Off	Off
Relay 1	Exchange	On	On	On	Off	Off	Off	Off	Off	Off	Off



Examples of some typical configurations on Xfarm

EXAMPLE 3

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps	4	Ventilation probe	1
Summer steps	6	Flap 1 control	Asso
Winter ventilat. off	Yes	Flap 2 control	Asso
Speed regulation	No	Flap 1 in summer	

Exit Down page

Flap 2	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat
Flap 1	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	Off	Off	Off	Off	Off	Off
Relay 3	Off	Off	Off	On	On	Off	Off	Off	Off	Off	Off
Relay 2	Off	Off	On	On	On	Off	Off	Off	Off	Off	Off
Relay 1	Exchange	On	On	On	On	Off	Off	Off	Off	Off	Off



EXAMPLE 4

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps	4	Ventilation probe	1
Summer steps	6	Flap 1 control	Depress
Winter ventilat. off	Yes	Flap 2 control	Asso
Speed regulation	No	Flap 1 in summer	Open 1

Exit Down page

Flap 2	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat	Associat
Flap 1	Depress	Depress	Depress	Depress	Depress	Open 1	Closed	Closed	Closed	Closed	Closed

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	Off	Off	Off	Off	Off	Off
Relay 3	Off	Off	Off	On	On	Off	Off	Off	Off	Off	Off
Relay 2	Off	Off	On	On	On	Off	Off	Off	Off	Off	Off
Relay 1	Exchange	On	On	On	On	Off	Off	Off	Off	Off	Off



Examples of some typical configurations on Xfarm

EXAMPLE 5

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps	10	Ventilation probe	1
Summer steps	0	Flap 1 control	Natural
Winter ventilat. off	No	Flap 2 control	Natural
Speed regulation	No	Flap 1 in summer	

Exit Down page

Flap 2	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural
Flap 1	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 3	Off	Off	Off	On	On	On	On	On	On	On	On
Relay 2	Off	Off	On	On	On	On	On	On	On	On	On
Relay 1	Exchange	On	On	On	On	On	On	On	On	On	On



EXAMPLE 6

CLIMATE CONFIGURATION 01-01-14 13:46:07

Winter steps	10	Ventilation probe	1
Summer steps	0	Flap 1 control	Proport
Winter ventilat. off	No	Flap 2 control	Proport
Speed regulation	No	Flap 1 in summer	

Exit Down page

Flap 2	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport
Flap 1	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport	Proport

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 3	Off	Off	Off	On	On	On	On	On	On	On	On
Relay 2	Off	Off	On	On	On	On	On	On	On	On	On
Relay 1	Exchange	On	On	On	On	On	On	On	On	On	On



EXAMPLE 7

Flap 2	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Depress	Depress	Depress	Depress	Depress
Flap 1	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Closed	Closed	Closed	Closed	Closed

Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off
Relay 3	Off	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off
Relay 2	Off	Off	On	Off	Off	Off	Off	Off	Off	Off	Off	Off
Relay 1	Exchange	On	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off



Winter ventilation is done by 5 speed autotransformer (each further step switches the previous step off).

EXAMPLE 8

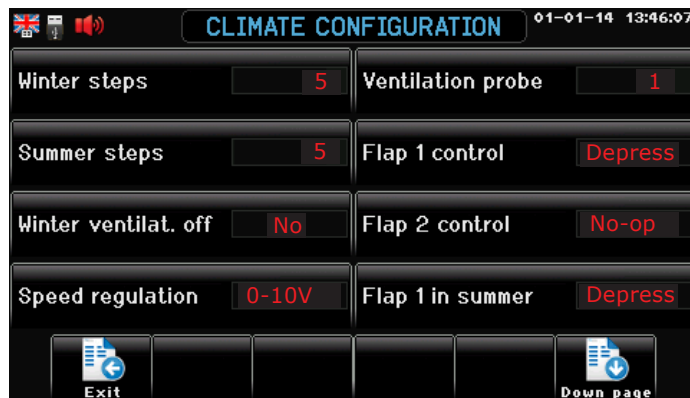
Flap 2	Closed	Closed	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress
Flap 1	Depress	Depress	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed	Closed

0-10V	Exchange	0-10V	10V	10V	10V	10V	10V	10V	10V	10V	10V	10V
Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	On	On	On	On	On	On	On
Relay 3	Off	Off	Off	On	On	On	On	On	On	On	On	On
Relay 2	Off	Off	On	On	On	On	On	On	On	On	On	On
Relay 1	Exchange	On	On	On	On	On	On	On	On	On	On	On



On this farm layout Ventilation is managed by speed regulation by inverter at Step 1 and by on/off ventilation on further steps (Step 2 to Step 10).

EXAMPLE 9



Flap 2	no-op	no-op	no-op	no-op	no-op	no-op	no-op	no-op	no-op	no-op	no-op
Flap 1	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress	Depress
0-10V	Exchange	0-10V	0-10V	0-10V	0-10V	0-10V	10V	10V	10V	10V	10V
Relay 10	Off	Off	Off	Off	Off	Off	Off	Off	Off	Off	On
Relay 9	Off	Off	Off	Off	Off	Off	Off	Off	Off	On	On
Relay 8	Off	Off	Off	Off	Off	Off	Off	Off	On	On	On
Relay 7	Off	Off	Off	Off	Off	Off	Off	On	On	On	On
Relay 6	Off	Off	Off	Off	Off	Off	On	On	On	On	On
Relay 5	Off	Off	Off	Off	Off	On	On	On	On	On	On
Relay 4	Off	Off	Off	Off	On	On	On	On	On	On	On
Relay 3	Off	Off	Off	On	On	On	On	On	On	On	On
Relay 2	Off	Off	On	On	On	On	On	On	On	On	On
Relay 1	Exchange	On	On	On	On	On	On	On	On	On	On
<div> <div>Step 0</div> <div>Step 1</div> <div>Step 2</div> <div>Step 3</div> <div>Step 4</div> <div>Step 5</div> <div>Step 6</div> <div>Step 7</div> <div>Step 8</div> <div>Step 9</div> <div>Step 10</div> </div> <div> <div>Winter ventilation</div> <div>Summer ventilation</div> </div>											

0-10V output has a ramp behaviour. It goes from min to max for each step (1-2-3-4-5). The ventilation system can be managed 2 ways:

A> Fan(s) at step 1 are speed regulated by inverter (0-10V). Once 100% of speed regulation is reached for any further increase of temperature the fan at Step 2 is switched on (on-off full speed) and fan(s) at Step 1 are reduced to min speed. For any further increase of temperature fan speed of Step 1 is proportionally increased up to 100%, then also the 3rd step is switched on (being step 2 always on) and so on. By using this procedure you can have a continuous ventilation curve by only using a small and relatively unexpensive inverter to control the 1st Step. Hence this 1st step is used to adjust ventilation within each on-off step.

Advantages: you get a continuous proportional ventilation curve by using only a small inverter. The first ventilation step should be equivalent to other steps as fan air flow capacity. Usually first step is made by 2 small fans of half capacity of big fans at other steps.

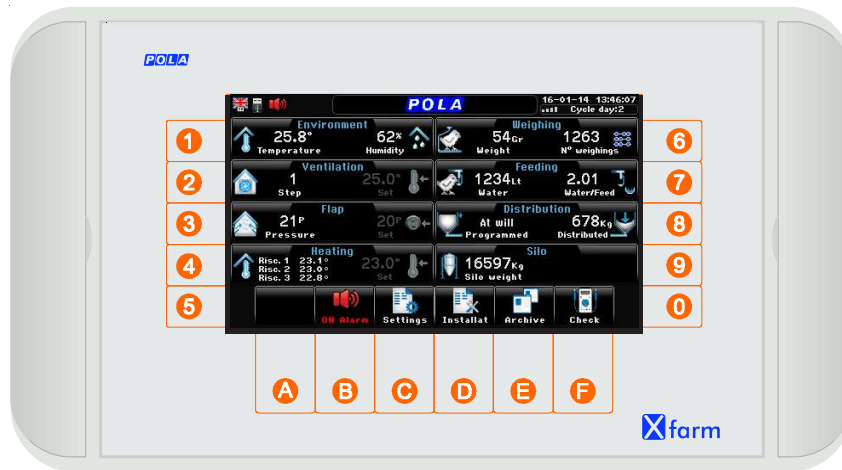
Disadvantages: beyond step 1 you can have on-off fans and inverter fans working at same time.

B> Fan(s) at Steps one is speed regulated up to 100% capacity. Beyond that temperature at step 2 a new speed regulated fan will be switched on at a preset % of speed and it will work at same speed of fan at step 1 (i.e. if Step 1 and Step 2 have equal max air flow they will be both set at 50% of nominal max speed). When more steps will be activated the speed of all the steps will change: 3 steps = 33% 4 steps = 25% and so on (assuming all steps have same max air flow).

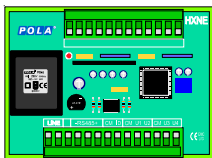
Advantages: All fans will be speed regulated at same speed.

Disadvantages: a bigger inverter is required to control all fans.

Xfarm layout components

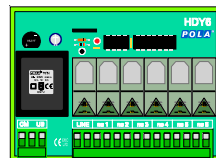


Xfarm computer



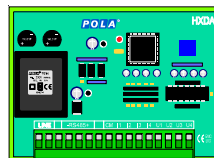
HXNE

N.8 Analogs Inputs unit



HDY6

N.6 Relays Output unit



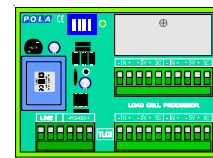
HXDA

N.4 0-10V Outputs unit



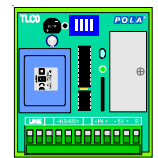
HA20

Power-pack for probe



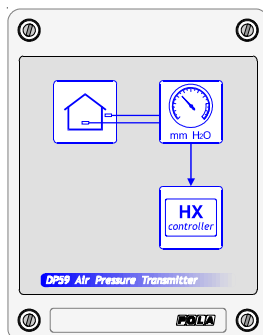
TLC2

Silo load-cells amplifier



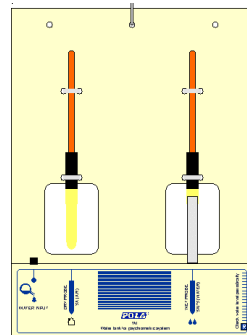
TLC0

Weighing plate amplifier

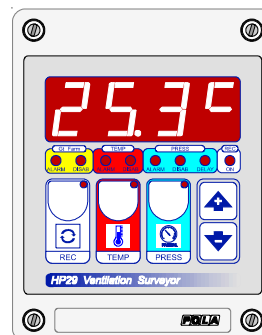


DP59/W

Negative pressure controller

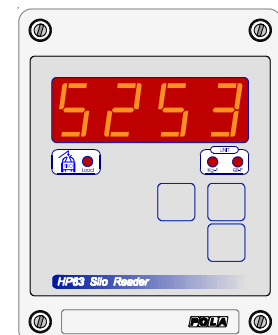


WT1: Psychrometric kit with dry bulb and wet bulb probe



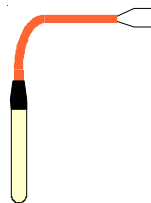
HP29/W

Additional alarm control



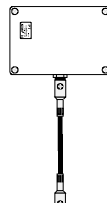
HP63/W

Silo weight repeater



SX

Temperature probe



PT

Flap feedback potentiometer



RHR

Humidity probe



CO2E

CO2 probe

INPUTS

HXNE N.1 INPUTS (CLIMATE)

- 1= Temperature probe Ventilation 1
- 2= Temperature probe Heating 1
- 3= Temperature probe Heating 2
- 4= DP59/W negative pressure controller
- 5= Humidity probe (Wet bulb or 4-20mA)
- 6= Outside temperature probe
- 7= Flap 1 Potentiometer
- 8= Flap 2 Potentiometer

HXNE N.2 INPUTS (CLIMATE)

- 1= Temperature probe Ventilation 2
- 2= Temperature probe Heating 3
- 3= Temperature probe Flap 1
- 4= Temperature probe Flap 2
- 5= Free (F.F.U)
- 6= CO2 probe 4-20mA
- 7= NH3 probe 4-20mA
- 8= External alarm input signal

HXNE N.3 INPUTS (FEEDING)

- 1= Water counter sensor
- 2= Hopper level sensor
- 3= Feed counter sensor
- 4= Free (FFU)
- 5= Free (FFU)
- 6= Free (FFU)
- 7= Free (FFU)
- 8= Upload silo signal

WEIGHT CELLS INPUT (FEEDING)

- N.1 **TLC0**= Birds weighing load cell amplifier
- N.1 **TLC2**= Silos weighing load cells amplifier

SILO WEIGHT REPEATER (FEEDING)

- N.1 **HP63/W**= Silo weight repeater

OUTPUTS

HDY6 N.1 OUTPUTS (CLIMATE)

- 1= Ventilation 1
- 2= Ventilation 2
- 3= Ventilation 3
- 4= Ventilation 4
- 5= Ventilation 5
- 6= Ventilation 6

HDY6 N.2 OUTPUTS (CLIMATE)

- 1= Heating 1
- 2= Heating 2
- 3= Cooling
- 4= Flap 1 Close
- 5= Flap 1 Open
- 6= Watch-dog (for **HP29/W**)*1

HDY6 N.3 OUTPUTS (CLIMATE)

- 1= Ventilation 7
- 2= Ventilation 8
- 3= Ventilation 9
- 4= Ventilation 10
- 5= Flap 2 Close
- 6= Flap 2 Open

HDY6 N.4 OUTPUTS (CLIMATE)

- 1= Heating 3
- 2= Humidification
- 3= Free
- 4= Free
- 5= Free
- 6= Free

HDY6 N.5 OUTPUTS (FEEDING)

- 1= Silo auger
- 2= Feeders
- 3= Light
- 4= Water (Normally Open water-valve)
- 5= Free timer
- 6= Free (f.f.u.)

0-10V OUTPUTS

- 1= Ventilation
- 2= Flap 1
- 3= Flap 2
- 4= Light

