# AUTOMATION AND VENTILATION SYSTEMS

# GÜRclimate SMART



## AUTOMATION SYSTEM (PLC)

KLIMARS I

Main Menu

MONITORING

Güres Poultry Automation System; It is a system that records and controls values such as outside temperature, indoor temperature, humidity and pressure, which are important for poultry management, according to certain parameters. In addition, it is a smart management system that records data such as feed consumption, water consumption, daily dead chickens numbers, and enables management and control of this data from a single screen. When the specified lower and upper parameter reaches the alert and warning system that switches the PLC supports to keep the animals in the best conditions in the poultry and poultry.

-101×

GÜRES

# USER FRIENDLY INTERFACE GÜRclimate SMART

29.04.2021 08:48:32

HISTORY

TRENDS

User friendly interface designed by Güres Technology.

SETTINGS

MARAJA

HISTORY

Turkish, English, French, Arabic and Russian language options.

### **Poultry Monitoring**

Güres Poultry Automaiton System suitable for mobile use; It allows access, control and regulation of all house data from mobile phones, tablets and computers.

# EASE OF TOUCH SCREEN SMART

Practical use with touch screen.





## ADMIN SCREEN

Admin Screen

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With the admin screen, all data related to ventilation, lighting, temperature and cooling, ventilation equipment mode can be observed from a single screen.

Cage Average Temperature 26,3 °C Set Temperature 22,0°C 0utside Temperature 35,8°C	13 Number of	ibilation Lev 0,000 m 13 f Operating Fa	3/5 	00	ng Level	GÜRES	
Left Middle Right Front 26,3°C 27,3°C 26,3°C 25,7°C 25,7°C 25,7°C	LEFT AREA			RIGHT AREA			
	Front 100	Middle 100	Back 100	Front 100	Middle 100	Back 100	
set 25,0 °C Brucked	Dampers				1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -		
(A) Humidity Pressure	Front Back 35 35		840k 35	Front		Back 35	
Actual 64,0 Rh 20 Pa set 75,0 Rh 20 Pa	Flap/Damper Pressure Mode			le			

### Monitoring Button

Via the 3D poultry visual with the option of monitoring button, observations can be made regarding the average temperature of the poultry, ventilation level, lighting level, in-house sensor placement and values, cooling pad operating value, humidity and static pressure values, flap and damper positions, in-poultry fan placement and fan operation.



### O Feed Consumption

Feed Consumption (With optional feed weighing system):

The amount of feed loaded into the silo, the amount of feed in the silo and the amount of feed consumed in the poultry are observed in kg. Silo occupancy rates are monitored according to the changing graphic color. If the alarm system data is processed and the minimum consumption is reached, the screen warning will be activated.





#### Water Consumption

Data on instant and last 7 day water consumption in poultry is monitored.



- There is a warning and alarm system when in-protected by system of the specified parameters.
- Password protected by system security
- Easy observation with 3D poultry house visual
- Accessing data either as a graphic or a list
- Thanks to data storage, a lot of information can be accessed and analyzed in the last 7 days (USB storage is required)

## FAN TYPES



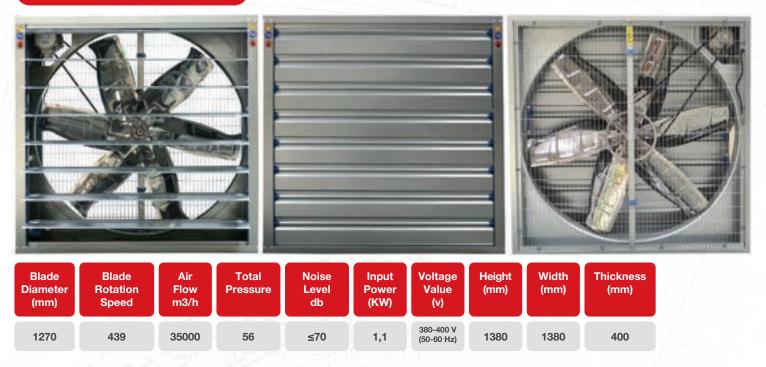


Fans are equipment that allow the air entering the poultry from the cooling pads or air inlet faps to be discharged out of the poultry in a controlled manner.

### Square Fan

- O Special twist designed 6 bladed fans
- O The inside is protected with a protective wire, and there are leaves with appropriate weight on the outside.
- O The air hitting these leaves during the operation allows the leaves to open naturally.
- O During the operation, the leaves are opened and the air is thrown out, preventing the dust, sunlight and wind from outside the poultry from entering the house.

### **Square Fan Specifications**



### **Chimney Fan**

Chimney fans mounted on the roof of the poultry house are the fans that operate in minimum ventilation mode when the outside temperature is low, and allow the air entering through the air inlets to be discharged to the outside. It functions the same as mini fans, it is an alternative.

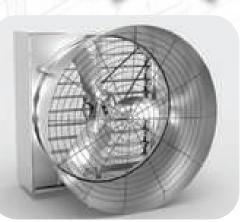
### Chimney Fan Specifications

Engine Type	Input Power	Voltage Value	Fan Total	Air flow	
	(KW)	(V)	Weight (kg)	m3/h	
STD	0,25	380-400 V (50-60 Hz)	27	11150	



# TYPES





### **Conical Fan**

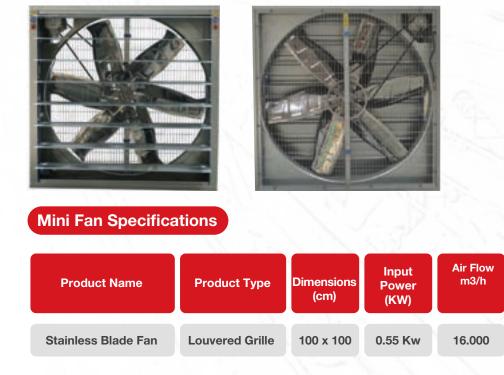
Conical fans o ered as an alternative to the Square Fan have an external discharge cone in addition to the square fan features. Conical fan increases the draft by preventing the fans from mixing with other fans and is and ideal fan for long houses where tunnel ventilation is used.

### Conical Fan Specifications

Di	rive	Blade Diameter (mm)	Blade Rotation Speed RPM	Engine Rotation Speed rpm	Air Flow m3/h	Total Pressure	Noise Level db	Input Power (KW)	Voltage Value (v)	Height (mm)	Width (mm)	Thickness (mm)
в	elt	1270	439	1400	40000	80	≤65	1,1	380-400 V (50-60 Hz)	1380	1380	1300

### Mini Fan

Mini fans mounted on the side walls of the poultry are the fans that operate in the minimum ventilation mode when the outside temperature is low and allow the air entering through the air inlets to be discharged outside.



## **FLAP / DAMPER ADDITIONAL** SYSTEMS AND VENTILATION



Flap / Damper

### Flap

Flaps placed on the part of the cooling pads inside the building along the pet meter; It prevents the air entering the coop through the pads from directly hitting the chickens, thus allowing the air to move upwards. The fresh air that enters inside and upwards towards the roof can reach the middle of the poultry and a healthy air circulation is provided. The flaps work depending on the automation panel and react to the sensor values measured on the panel.

### Flap / Damper

When deemed necessary after a certain cage floor height, the dampers included in the system in addition to the diameters are placed on the part of the cooling pads inside the building along the pad length.

Fresh air entering the poultry floor in a downward direction minimizes the temperature differences that may occur between the poultry floor and the roof.

Dampers operate in connection with the automation panel and react to the sensor values measured on the panel.



**External Protection Corrugated Sheet** 



### **Ventilation System**

You can provide the ideal conditions for your poultry house with the ventilation system alternatives designed by Güres Technology with over 60 years of experience. Ventilation systems; It provides homogeneous ventilation, cooling, humidity and pressure control in poultry houses. While controlling the temperature inside the poultry house, it also meets the minimum and maximum air requirement of the animals.



Ventilation

### Pad Curtain System

Generally, it is used to adjust the amount of air entering or to prevent the incoming air in cooling pads where in-poultry air guiding covers (Flap and Damper) are not mounted.

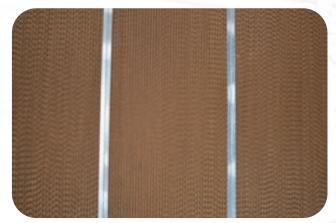
The tarpaulin in the curtain system prevents the passage of air by wrapping the outer surface of the cooling pads installed outside the poultry. It works automatically depending on the automation panel.



## **PAD** ADDITIONAL SYSTEMS AND VENTILATION

### **Cooling Pad**

- O Cooling pads trap water inside due to their structure.
- O It loaded up moisture from the outside of the cooling pad, poultry house so that cooling is done.
- O Set to cool, damp air is loaded into the appropriate space located in the pad.
- Cooling the field of pet chicken breed, the number of regions is determined by the climate conditions and building condition.
- O For a healthy cooling, calculations must be made carefully.





PAD SIZES

120\*60\*15 150\*60\*15

200\*60\*15

Brown

### Air Inlet Flap (Air Inlet – Buffle)

Air intake flap; While minimum ventilation is activated in cold weather conditions, it allows cold air to enter the poultry without directly affecting the temperature of the poultry. In this way, the cold air entering the poultry from different points will be mixed with the heavier mass air inside and ventilation is provided without decreasing the temperature inside the poultry.

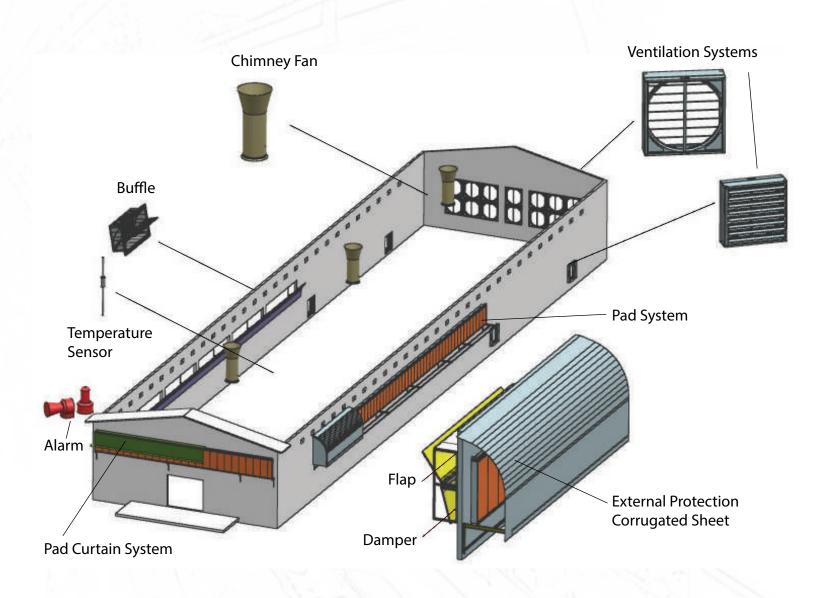


External dimensions; Length: 60 cm, Height: 32.5 cm Flange dimensions; Length:53.5 cm, Height:26.5 cm



### **Technical Drawings**

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