



Big Dutchman®



235pro

The climate computer for optimum climate control
in smaller poultry houses

235pro – the clearly arranged, user-friendly computer for



Big Dutchman's **235pro** is an important prerequisite for a reliably working ventilation system in your poultry house, whether it involves growing poultry or keeping laying hens.

The **235pro** is characterized by precise control, functional reliability and user-friendliness. In addition to temperature and humidity control, the computer controls heating, humidification and cooling. There are also several pause functions available, such as soaking, for example.

The most important advantages at a glance:

- ✓ **PID climate computer:** The house temperature is regulated quickly and precisely to the required level.

- ✓ **USB flash drive:** The in- and customisation of the flash drive also allows to create a backup copy of his climate computer.

- ✓ **Display:** Any relevant data is shown graphically. Functions are immediately available to operate.

- ✓ **Different user levels:** The computer settings are protected; non-authorized users cannot change the computer settings.

- ✓ **Modular hardware:** Each function has to be in-

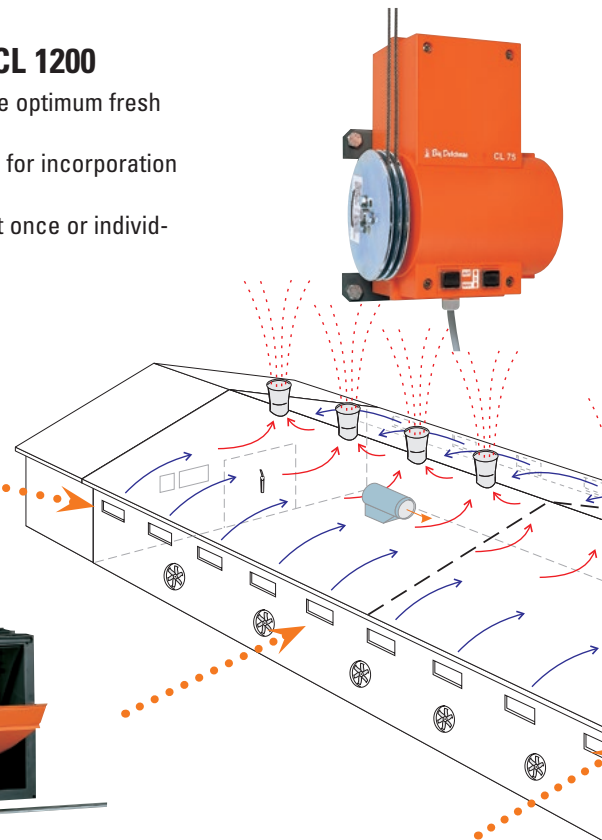
Important functions

- ✓ control of up to eight MultiStep® groups (depending on the extension stage) → minimum power consumption;
- ✓ control of different heating systems, on/off or steplessly variable in case of warm water heating systems;
- ✓ display of exhaust air volume in m³/h;
- ✓ control of cooling and humidification;
- ✓ cycle ventilation during minimum ventilation;
- ✓ humidity control with/without heat;
- ✓ extended control based on pre-set curves (temperature, heat, humidity, underfloor heating, minimum and maximum ventilation);
- ✓ registration of usage rates of up to four water meters;
- ✓ water alarm in case of over- or undersupply as compared to the previous day;
- ✓ sequential control of two steplessly variable fan groups;
- ✓ control of up to four timers for light/feeding;
- ✓ trend curves;
- ✓ pause function (soaking, washing, drying);
- ✓ frost protection for empty houses;
- ✓ environment function → temperature or ventilation can be increased during inspection rounds;
- ✓ log file for alarm and operation;
- ✓ access code;
- ✓ connection to the BigFarmNet Manager PC program.

COMBINATION OF BIG DUTCHMAN STA

Wall inlet CL Flex or CL 1200

- ✓ universal wall inlets ensure optimum fresh air supply
- ✓ available as flange inlet or for incorporation into a wall
- ✓ can be opened either all at once or individually



Fogging Cooler

- ✓ ideal for cooling, humidifying and soaking
- ✓ ensures comfortable temperatures in the house on hot summer days
- ✓ provides the correct relative humidity
- ✓ reduces dust problems
- ✓ special nozzles made of stainless steel allow for very low flow rates but very high passage speeds and thus produce a very fine aerosol fog



climate control in smaller poultry houses

Installation of new programs and configurations is simple and allows the farm manager to work with the individual settings of

curve progression is displayed that are used on a daily basis and are available in the menu → easy to

The user levels are password protected and unauthorized persons cannot change

easy to expand when new components are implemented.



Temperature-controlled emergency opening 378 T

The temperature-controlled emergency opening system 378 T helps to ensure survival of the livestock in case of power failures or technical breakdowns. The system comprises a 24 V DC power supply unit with built-in maintenance-free battery and charger and a separate temperature probe.

The temperature at which the emergency opening function is to be activated can be set at the 378 T. This means that in the case of an emergency, the air inlets and outlets will be controlled based on the temperature. The emergency function itself is integrated in the 235pro.

STANDARD COMPONENTS FOR OPTIMUM CLIMATE CONTROL

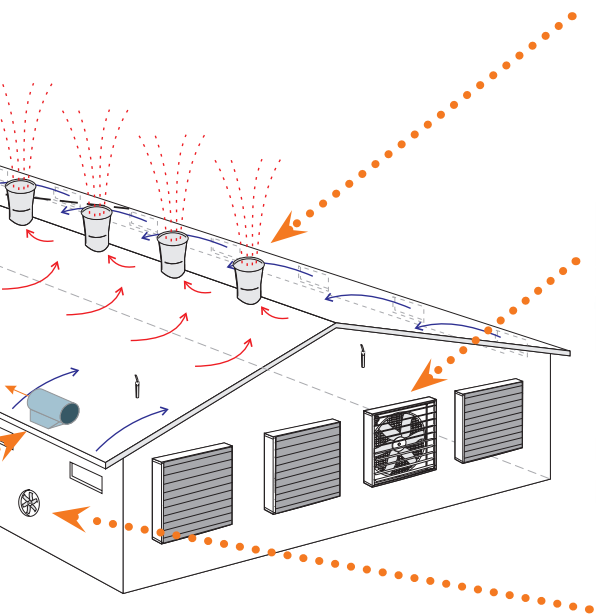
Servo motor CL 75

- ✓ regulates the flap position of the wall inlets
- ✓ compact design, robust and maintenance-free
- ✓ standard version features one steel cable and two lines; extendible
- ✓ relay-controlled and available for 24 V DC as well as 230 V AC
- ✓ electric switch for manual operation included



Exhaust air chimney CL 600

- ✓ large air capacity
- ✓ smooth, dirt-repellent surface
- ✓ self-supporting roof plate construction renders additional suspension unnecessary
- ✓ corresponding pipe fan is easy to install and available in different versions
- ✓ two diameters (600/920 mm) are available



V 130 AirMaster*

- ✓ effective fan with a very large diameter
- ✓ high air performance with low energy consumption
- ✓ shutter opens by means of air flow and stays open thanks to counterweights → minimal air resistance
- ✓ low noise level
- ✓ motor without cooling fan → very low-maintenance
- ✓ solid, robust and simple construction



Heating JetMaster or Thermorizer

- ✓ with or without flue gas exhaust (RGA)
- ✓ ensures optimum temperatures in the house
- ✓ for operation with natural gas or propane
- ✓ temperature-sensitive control
- ✓ flame guard
- ✓ built-in fan with large throwing range → good distribution of warm air
- ✓ the heat generated is 100 % beneficial to the birds → no heat loss



Axial fan with frame*

- ✓ for incorporation into a wall
- ✓ frame has an aerodynamic shape and is made of high-quality cast steel
- ✓ blades are made of aluminium die-cast → long service life
- ✓ high air performance with low energy consumption
- ✓ easily controllable, low noise level
- ✓ available with diameters from 350 to 920 mm

* in accordance with the new European Directive (ErP 1) from 2013

235-S, 235-L and 235-XL – 3 extension stages for all requirements

The **235-S** (235-S1 for one house; 235-S2 for two houses) is equipped with six relays per house, i.e. a maximum six of the listed functions are available.

The **235-L** (235-L1 for one house; 235-L2 for two houses) is equipped with twelve relays per house, i.e. a maximum twelve of the listed functions are available.

The **235-XL** is equipped with twenty relays per house, i.e. a maximum twenty of the listed functions are available.

Attention: Relay-controlled servo motors always occupy two relays.

Overview of functions 235-S / 235-L / 235-XL

Air supply:	Fresh air inlet 1 Fresh air inlet 2 parallel or sequence-controlled Fresh air inlet 3 parallel or sequence-controlled Fresh air inlet 4 parallel or sequence-controlled Fresh air fan 1 Fresh air fan 2 Relay for extra fresh air via outside or inside temperature Frost protection for fresh air
Exhaust air:	Exhaust air flap steplessly variable 1a Exhaust air flap steplessly variable 1b Exhaust air flap steplessly variable 2a Exhaust air flap steplessly variable 2b Speed control exhaust air A internal or external 0-10 V Speed control exhaust air B internal or external 0-10 V Number of MultiStep groups: 235-S: 2; 235-L: 4; 235-XL: 8
Central extraction:	Control of central extraction system
Emergency opening:	Temperature-controlled emergency opening Emergency air relay

Heating:	Space heating Zone heating
Cooling, humidifying, soaking, spraying	
Sensors:	Underfloor heating Humidity sensor CO ₂ sensor for minimum ventilation Additional sensors (pressure, temperature, NH ₃ , O ₂ , humidity)
Environment function	
Timer:	up to four timers
Water meter:	up to four water meters
Free-range function (manual entry "free range open")	
Key switch for moving-out function	
BigFarmNet Manager	

BigFarmNet Manager

This management program allows you to display and manage the entire house climate via graphs and lists at your home PC. BigFarmNet Manager runs on Windows and visualises all connected houses and their in-house climate conditions clearly. This includes for example inside and outside temperature, relative humidity and the flap positions of fresh and exhaust air units. The home PC is connected to the 235pro by the BFN interface database and DSL or ISDN.

- ✓ optimised user interface with symbols and graphic elements
- ✓ detailed alarm log, history and analysis
- ✓ remote control of 235pro as well as rapid data exchange between PC and 235pro
- ✓ apps for Android and iPhone available.



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