CLIMATE

Optimum conditions.

nutricontrol
Automatic Fertigation & Climate Control

Nutricontrol's Climate Controllers are specially designed to obtain the optimum climate conditions inside the greenhouses. They manage automatically the different actors in the greenhouse, *(vents, heating, curtains, humidity of the system, ventilators, etc.)* based in the information of the sensors.

The climate controllers developed by **Nutricontrol** are endorsed by the quality offered throughout 25 years of experience in the market, they offer the next features:

- Upgrade of the installation without changing the equipment.
- Increasing functions without changing the equipment.
- Possibility of expanding the number of compartments through codes.
- Inputs and outputs extension through cable or radio control.
- Operates at voltages of 12 VDC or 24 VAC.
- Digital outputs *(Relays)* and digital inputs.
- Analogue input card.
- Easy hardware upgrade.
- Full PC - Equipment communication.
- Communication via Web/App for smartphone, iOS or Android.

(SEE TABLE ON THE BACK)

AENOR ER Registered Company ISO 9001 ER-0664/2003

IQNet CERTIFIED MANAGEMENT SYSTEM

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V02

V4 RANGE

	MASTIA V	MASTIA H	MASTIA VH	MASTIA VS	MASTIA VHR	MASTIA VHS	MITHRA CLIMA	MITHRA CLIMA PRO
General Features								
Number of compartments	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8
Meteorological station with pluviometer	✔	✔	✔	✔	✔	✔	✔	✔
Meteorological station data transmition through network	✔	✔	✔	✔	✔	✔	✔	✔
Meteorological station data reception through network	✔	✔	✔	✔	✔	✔	✔	✔
Astronomical clock	✔	✔	✔	✔	✔	✔	✔	✔
Activation of standard programs	-	-	-	-	-	-	✔	✔
Number of standard programs per compartment	-	-	-	-	-	-	1	1
Alarms								
Number of storm alarm	2	2	2	2	2	2	2	2
Rain, frost, storm alarm control	✔	✔	✔	✔	✔	✔	✔	✔
High / Low compartment temperature alarm control	✔	✔	✔	✔	✔	✔	✔	✔
High / Low compartment humidity alarm control	✔	✔	✔	✔	✔	✔	✔	✔
High / Low pipe temperature alarm control	-	-	-	-	-	-	✔	✔
Ventilation								
Ventilation temperature control	✔	-	✔	✔	✔	✔	✔	✔
Ventilation temperature periods	6	-	6	6	6	6	6	6
Ventilation temperature corrections based on humidity	✔	-	✔	✔	✔	✔	✔	✔
Ventilation temperature corrections based on radiation	✔	-	✔	✔	✔	✔	✔	✔
Vent control	✔	-	✔	✔	✔	✔	✔	✔
Number of vents for compartment	3	-	3	3	3	3	6	6
Vent control periods	3	-	3	3	3	3	3	3
Lee side/Wind side vent control	✔	-	✔	✔	✔	✔	✔	✔
Modulating vent control based on wind speed	✔	-	✔	✔	✔	✔	✔	✔
Possibility of autocalibration everyday	✔	-	✔	✔	✔	✔	✔	✔
Fan Pad Step control	-	-	-	-	✔	-	✔	✔
Fan Pad Periods	-	-	-	-	2	-	2	2
Influence of shading / energy curtain in vent control	-	-	-	✔	-	✔	✔	✔
Influence of Fan Pad Step in vent control	-	-	-	-	✔	-	✔	✔
Vent position sensor	-	-	-	-	-	-	-	✔
Vent position alarm control	-	-	-	-	-	-	-	✔
Misting								
Misting control	-	✔	✔	-	✔	✔	✔	✔
Misting control periods	-	3	3	-	3	3	3	3
Misting control per compartment	-	3	3	-	3	3	3	3
Misting control based on high compartment temperature	-	✔	✔	-	✔	✔	✔	✔
Curtains								
Number of curtains	-	-	-	1	-	1	1	4
Number of shading curtains for compartment	-	-	-	-	-	-	-	2
- Shading curtain periods	-	-	-	-	-	-	-	1
- Shading curtain control based on radiation	-	-	-	-	-	-	-	✔
Number of blackout curtains for compartment	-	-	-	-	-	-	-	1
- Blackout curtain control	-	-	-	-	-	-	-	✔
- Blackout curtain control based on radiation	-	-	-	-	-	-	-	✔
- Blackout curtain periods	-	-	-	-	-	-	-	1
Number of shanding/energy curtains for compartment	-	-	-	1	-	1	1	1
- Shanding / energy curtain humidity	-	-	-	✔	-	✔	✔	✔
- Shanding / energy curtain temperature	-	-	-	✔	-	✔	✔	✔
- Shading/Energy curtain control	-	-	-	✔	-	✔	✔	✔
- Energy curtain periods	-	-	-	1	-	1	1	1
- Energy curtain control based on radiation	-	-	-	✔	-	✔	✔	✔
- Energy curtain control based on outside temperature	-	-	-	✔	-	✔	✔	✔
- Shading curtain periods	-	-	-	1	-	1	1	1
- Energy curtain control based on radiation	-	-	-	✔	-	✔	✔	✔
- Shading curtain control based on compartment temperature	-	-	-	✔	-	✔	✔	✔
Air recirculation								
HAF fans control	-	-	-	-	✔	-	✔	✔
Number of steps	-	-	-	-	3	-	3	3
HAF fans periods	-	-	-	-	3	-	3	3
Activation by high / low temperature	-	-	-	-	✔	-	✔	✔
Activation by high / low humidity	-	-	-	-	✔	-	✔	✔
Start / Stop with misting	-	-	-	-	✔	-	✔	✔
Activation by shanding / energy curtain position	-	-	-	-		-	✔	✔
Heating								
Heating temperature control	-	-	-	-	-	-	✔	✔
Heating temperature periods	-	-	-	-	-	-	6	6
Heating temperature corrections based on radiation sum	-	-	-	-	-	-	✔	✔
Heaters control	-	-	-	-	-	-	✔	✔
Heaters periods	-	-	-	-	-	-	3	3
Heating pipes control	-	-	-	-	-	-	✔	✔
Heating pipes periods	-	-	-	-	-	-	3	3
Heating pipe temperature corrections based on radiation	-	-	-	-	-	-	✔	✔
Outside temperature influence on calculated pipe temperature	-	-	-	-	-	-	✔	✔
Wind speed influence on calculated pipe temperature	-	-	-	-	-	-	✔	✔
Heating pipe temperature PI control	-	-	-	-	-	-	✔	✔
Heating pump week maintenance	-	-	-	-	-	-	✔	✔
Ring line control (heating)	-	-	-	-	-	-	-	✔
CO_2								
CO_2 control	-	-	-	-	-	-	-	✔
CO_2 control periods	-	-	-	-	-	-	-	3
High / LowCO_2 level alarm control	-	-	-	-	-	-	-	✔
Hardware / Software								
Number of analogical inputs	≥8	≥8	≥8	≥8	≥8	≥8	≥8	≥8
Number of digital Inputs	≥8	≥8	≥8	≥8	≥8	≥8	≥8	≥8
Number of digital Outputs	≥16	≥16	≥16	≥16	≥16	≥16	≥16	≥16
Configurable Inputs / Outputs	✔	✔	✔	✔	✔	✔	✔	✔
Hardware extension possibility	✔	✔	✔	✔	✔	✔	✔	✔
Communication								
Communication with PC	✔	✔	✔	✔	✔	✔	✔	✔
Web / App communication	✔	✔	✔	✔	✔	✔	✔	✔