

FOG SYSTEM
Control Cabinet BV



CONTROL CABINET

Table of Contents

Safety information	3-4
RoHS declaration	5
Delivery contents	6
Wall installation	
Installation steps	7
Step 1 - Placing and wall attachment	8 –9
Step 2 - Electrical connections	11 to 13
Step 3 - Control connection	14
Step 4 - Air connection	15
Setting up	16
System management	
Status menu	17
Configuration menu	18
Configuration changing menu	19-20
Maintenance	
Spares list	21

Important

Please read, heed and follow the enclosed safety information and the warning labels inside the control cabinet before installation or maintenance.

Warnings & safety symbols



Warning : This symbol is used to designate a danger of injury or potential damage to the system.



Caution : High voltages are present inside the control cabinet. All works concerned with the electrical installation must be carried out by skilled and qualified personnel.



Warning : the end user should ensure that the equipment be disposed of according to the local prevailing regulations.

Delivery and storage

Any loss or damage during delivery should be reported to carrier by registered letter within 3 working days and be advised to **devatec** or to authorized dealer.

It is recommended that the Control Cabinet be kept in its transit packaging for as long as possible prior to maintenance. If the control cabinet is to be put into storage prior to installation, it must be stored under cover and protected from physical damage, dust, frost, rain and humidity. More than 6 months storage is not recommended.

General



This manual contains all details necessary for the planning and installation of the Control cabinet. In addition commissioning and maintenance details are included. The manual is intended for use by engineers and properly trained technical personnel. Maintenance, servicing or repair work must only be carried out by suitable skilled and qualified personnel, the customer must be responsible for ensuring their suitability. Any risks or hazards, especially when working from ladders or towers should be identified by a skilled and Health and Safety representative and effective control measure put in place. No liability will attach to the Distributor if any damage, injury or accident is attributable to inattentive, inappropriate, negligent or incorrect operation of the machinery whether or not caused deliberately. Always isolate all electrical and water supplies before commencing any maintenance. Every effort has been made to ensure details contained in this manual are correct, however, in view of the wide range of conditions experienced in air handling systems, the information provided should only be used as a guide. Please contact your Agent if any doubt.

Correct use

The Control cabinet are intended for the exclusive use of air humidifiers type BUS, air handling unit or room environment within the limits of the specified operating conditions. Any other use is considered to be non-compliant and may render the system unsafe.

Electricity



All work concerned with electrical installation MUST only be performed by skilled and qualified technical personnel (eg electrician or technicians with appropriate training). The customer MUST be responsible for ensuring their suitability. It is the duty of the installer to ensure that suitable sized cables and MCB protection is provided. Please observe the local regulations concerning the provision of electrical installations.

Warranty

A one year warranty term materials and workmanship is applicable to the parts of the Control Cabinet .

Notes

The manufacturer's policy is one of continuous research and development. He therefore reserves the right to amend without notice the specifications given in this document.

The photographs are for illustrating purposes only.



CONTROL CABINET

RoHS declaration

devatec sas

Rue Feu St Eloi
76550 Ambrumesnil
France

Confirms that the Control Cabinet is manufactured in compliance with the European regulations 2002/95/EU (RoHS).

This guideline regulates after July 1st 2006 the use of mercury, cadmium, lead (soldering processes), chrome VI as well as PBB and PBDE. Control Cabinet manufactured previously to this date may contain above materials.

Name : MINFRAY Jean-Marie
Position : R&D Engineer
Date : 01/10/2017

Signature:

A handwritten signature in black ink, appearing to be "JM" or similar initials, written over a light blue horizontal line.



Any loss or damage during delivery should be reported to carrier by registered letter within 3 working days and be advised to **devatec** or to authorized dealer.

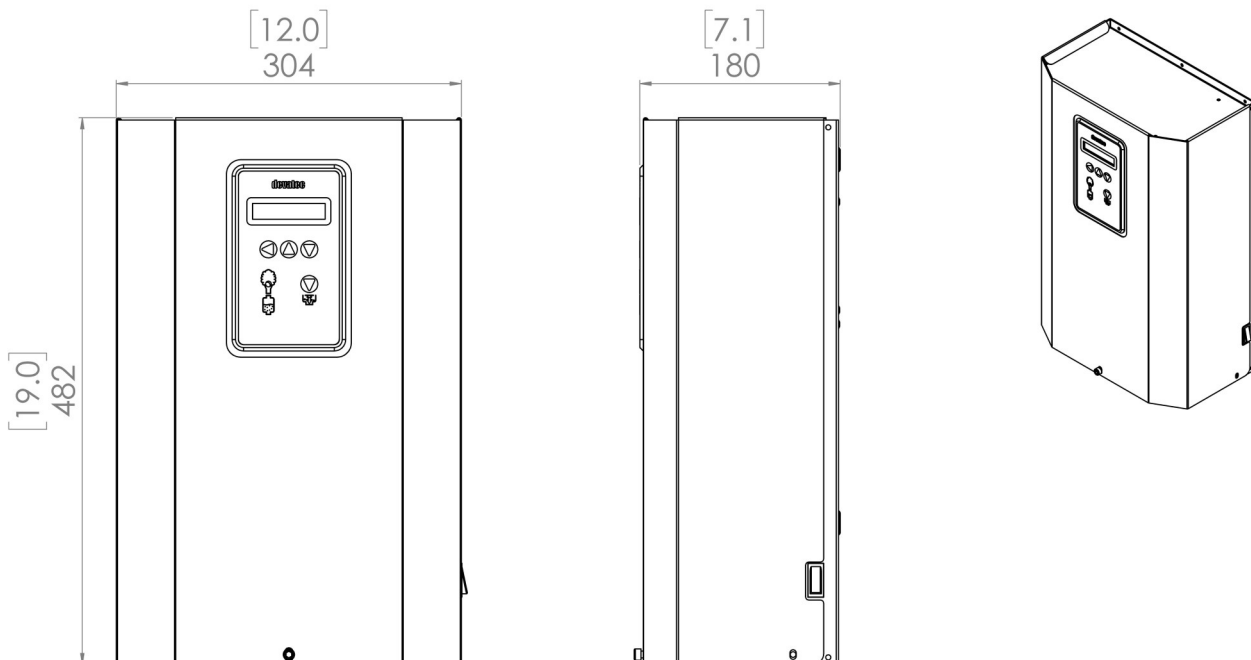
It is recommended that the Control Cabinet be kept in its transit packaging for as long as possible prior to maintenance. If the humidifier is to be put into storage prior to installation, it must be stored under cover and protected from physical damage, dust, frost, rain and humidity. More than 6 months storage is not recommended.

What is in the box :

1. One Control Cabinet (with display)

Options;:

- Remote information board
- Outdoor enclosure protection
- Humidity high limit switch
- UV Lamp
- Humidity sensor



Weight 10kg



All works concerned with electrical installation must be carried out by a skilled and qualified personnel.

Please read, heed and follow the enclosed information for the installation of the humidifier and the steam, water and electrical networks.

For further technical assistance, feel free to call **devatec**.

Failure to adhere to manufacturer's installation recommendations will invalidate your warranty.

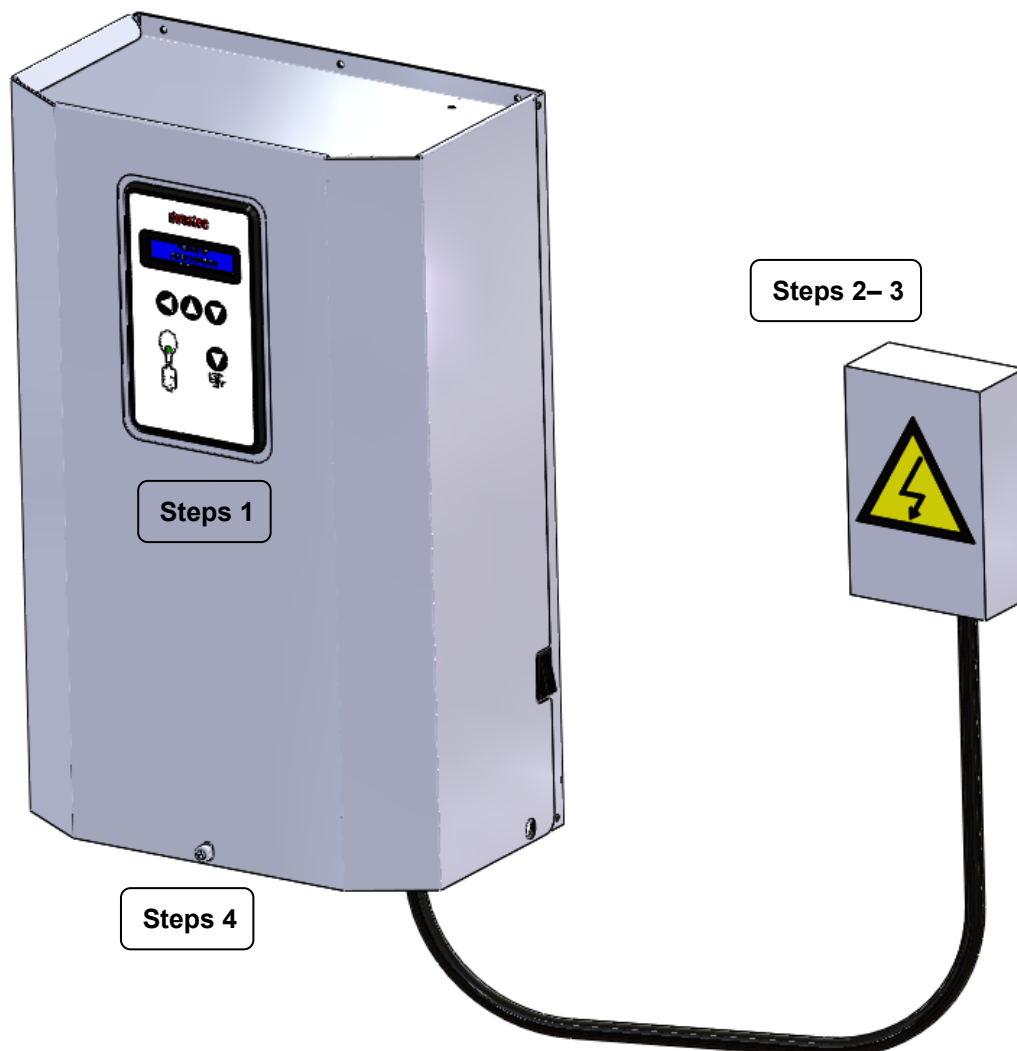
Steps

Setp 1 - Placing and wall attachment

Step 2 - Electrical connection

Step 3 - Control connection

Step 4 - Air connection



How to install the control cabinet on wall

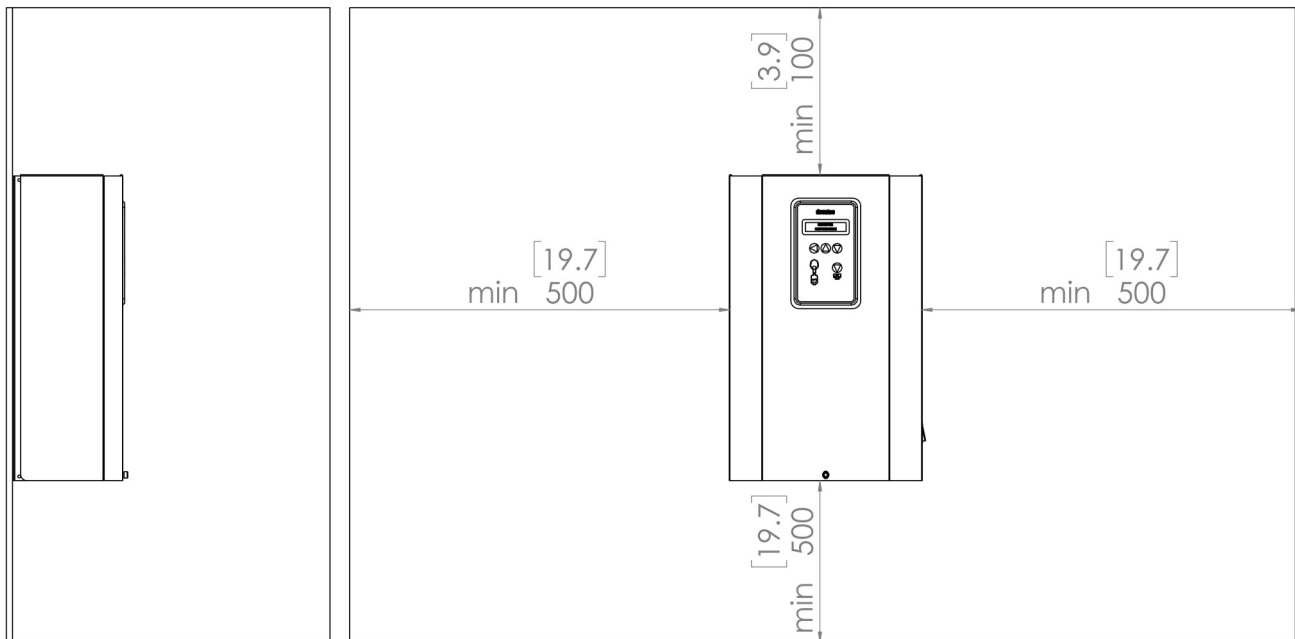
Installation tips :

The Control cabinet should be operated within 5°C and 40°C in a room with less than 80% of humidity.

When in operation, the rear panel becomes hot (60°C) so do not hang the humidifier on a heat sensitive surface.

The Control cabinet have been developed to be hanged on wall. Before installation, make sure that the surface material is strong enough to hold the control cabinet.

Consider free space around the humidifier to allow easy access for maintenance purposes (s.a. here under sketches).



Installation on wall

Nota :

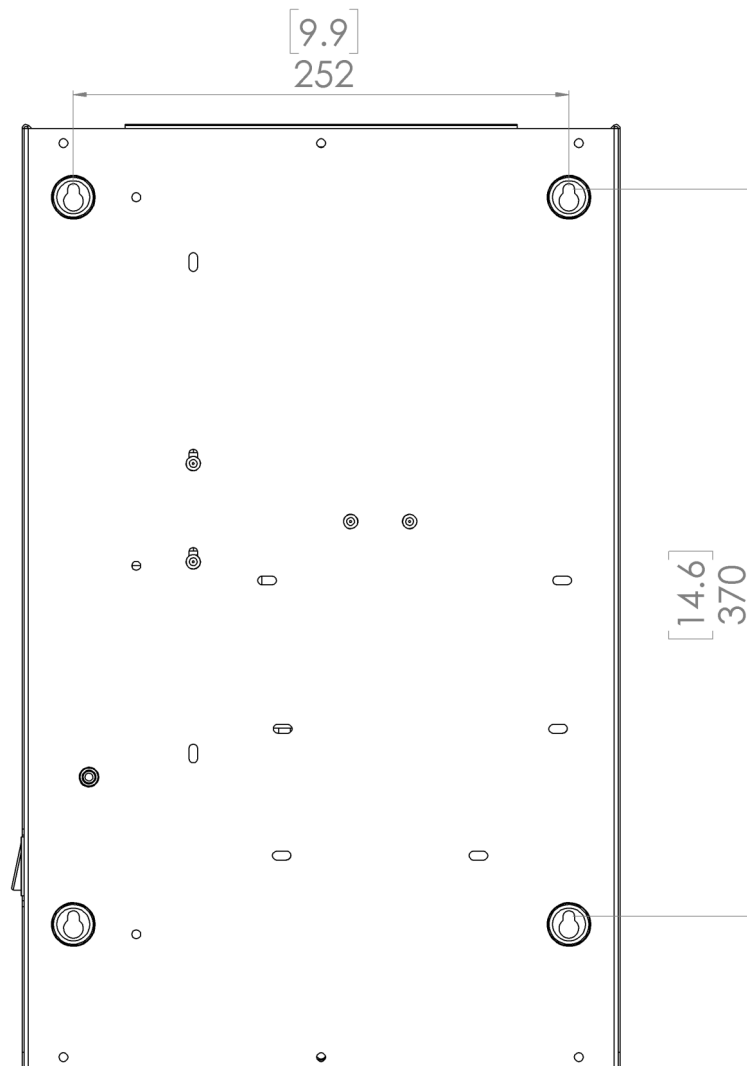
Use installation equipment and material appropriate to the surface on which the unit should be hung .

Method:

Mark and drill the mounting holes for 6 mm screws (s.a. the drilling distance table) :
Control Cabinet : 4 mounting screws.

Insert pegs in holes and the upper screws. Allow about 10 mm for hanging the cabinet.

Hang the cabinet and level it vertically and horizontally. Screw up the upper screws and then screw up the lower screws.





RECOMMENDATION :



All works concerned with the electrical installation must be carried out by skilled and qualified personnel (eg electrician with appropriate training). The customer is responsible for ensuring their suitability. Please observe local regulations concerning the provision of electrical installations.



Check all electrical terminal screws at commissioning, after 50 hours operation and at every service thereafter.

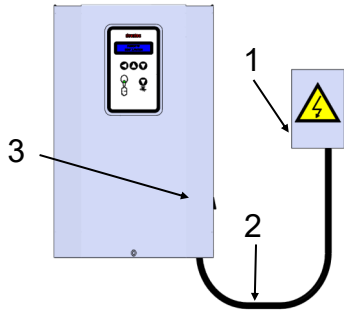


Take care : the Control cabinet, electronic components are very sensitive to electrostatic shocks. Appropriate steps must be taken before any operation.

ELECTRICAL CONNECTIONS



All works concerned with electrical installation must be carried out by a skilled and qualified personnel.
Make sure that all incoming power supplies are isolated before installation and maintenance of the Control Cabinet

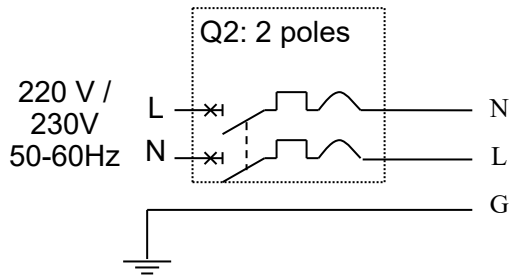


- 1 - Power supply isolator and MCB (Customer supply)
- 2 - Power supply cable
- 3- Electrical compartment

WARNING :

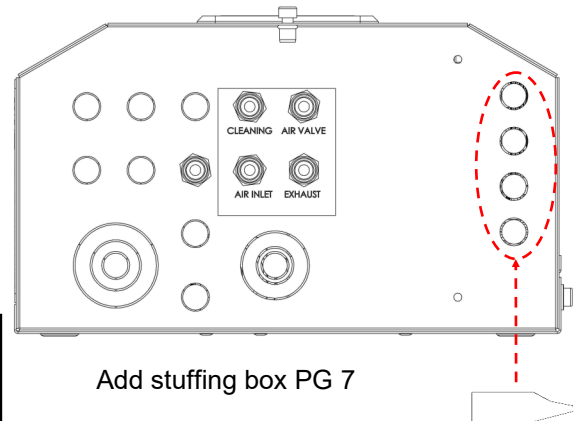
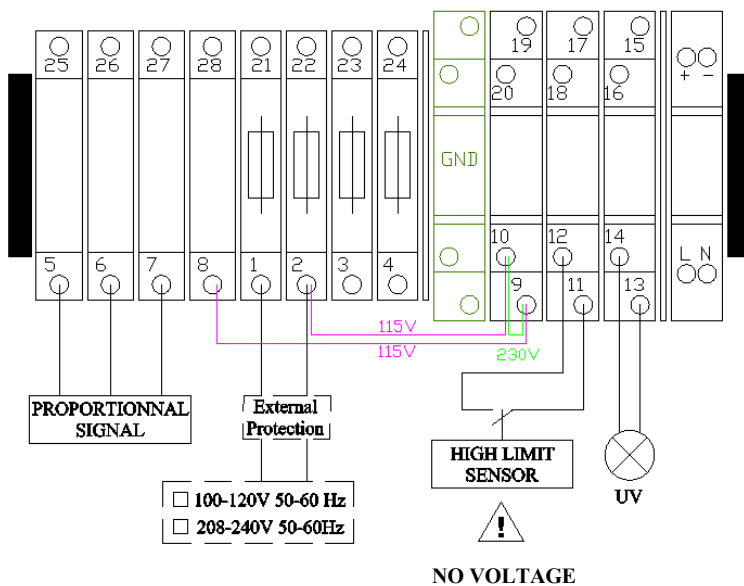
Failure to fit an electrical power isolator and MCB as part of the electrical installation significantly increases the risk of electric shock, which can be fatal.

1- Power supply isolator and MCB (near the unit)

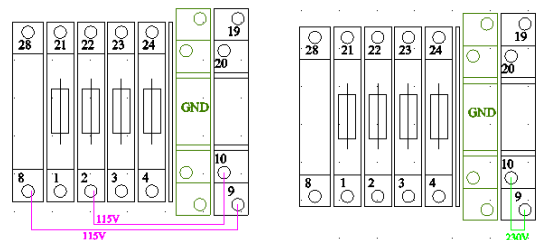


Q2: MCB and electrical power isolation
Q2: MCB and electrical power isolation

3- Electrical compartment



Power supply configuration:
-115V :
-230V :



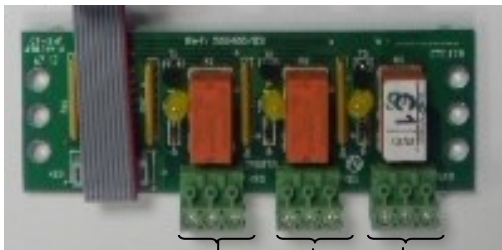
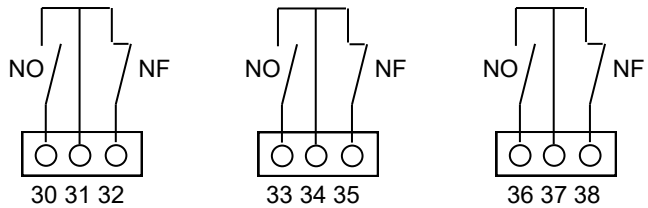
Failure to observe manufacturer's installation recommendations will invalidate the manufacturer's warranty.



ALL WORKS CONCERNED WITH ELECTRICAL INSTALLATION MUST BE CARRIED OUT BY A SKILLED AND QUALIFIED PERSONNEL

REMOTE INFORMATION BOARD (OPTION)

Contact can be modified in NO or NF by wiring as per the following schemes (ex: wiring on 30 & 31 = NO contact).



- X22 connector (36-37-38): Remote production dry contact.
- X21 connector (33-34-35): Remote general fault dry contact
- X20 connector (30-31-32): Remote maintenance dry contact

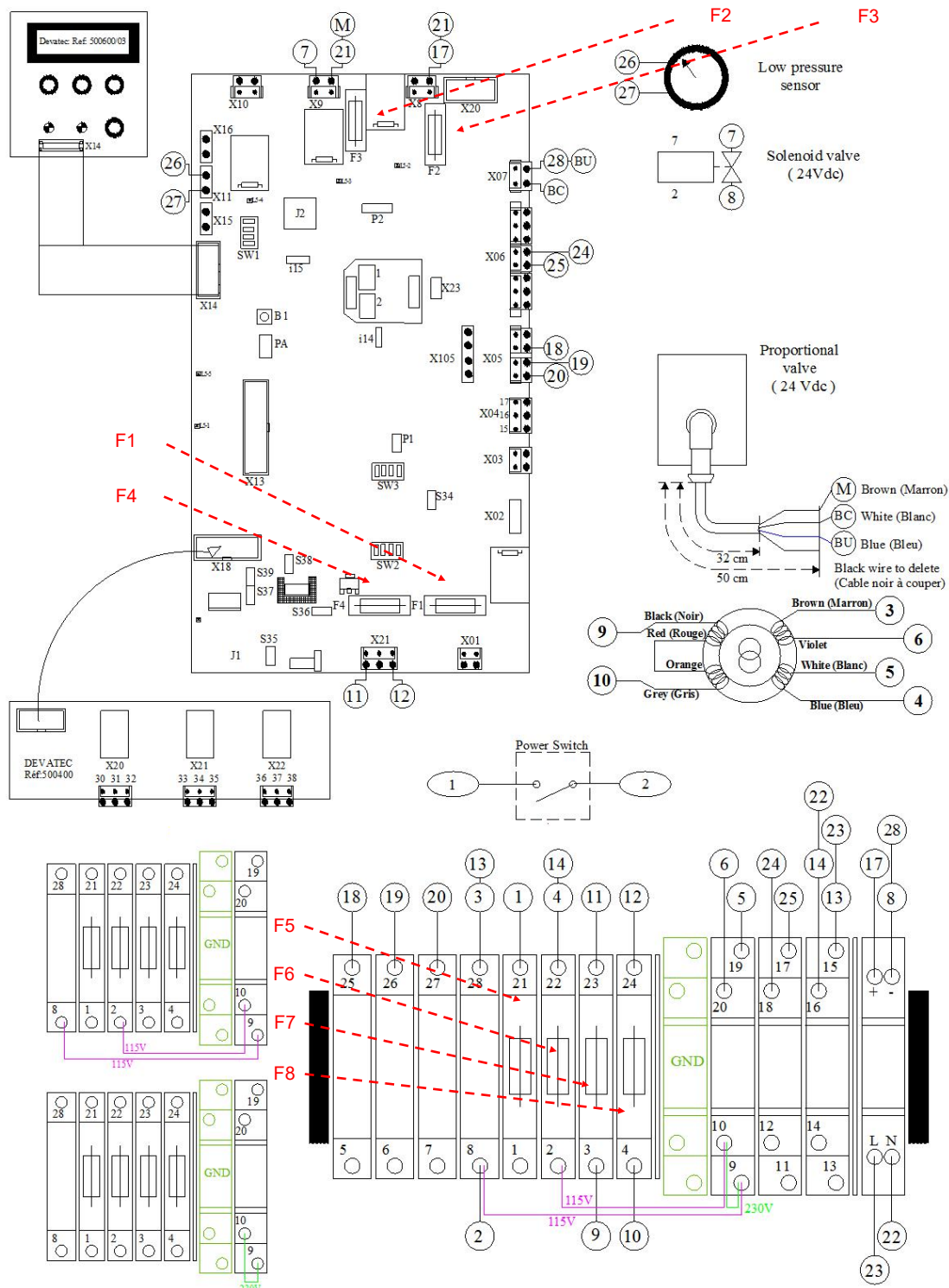


The wiring of the optional equipment described under must be made with 0.75 mm² flexible shielded cable.



ALL WORKS CONCERNED WITH ELECTRICAL INSTALLATION MUST BE CARRIED OUT BY A SKILLED AND QUALIFIED PERSONNEL

WIRING SCHEME



Mark	Intensity	Fuse function
F1	2A Temporised	Protection of UV Lamp
F2	2A Temporised	Protection of the purge valve
F3	2A Temporised	Protection of the distributor
F4	2A Temporised	Protection of the electronic boards

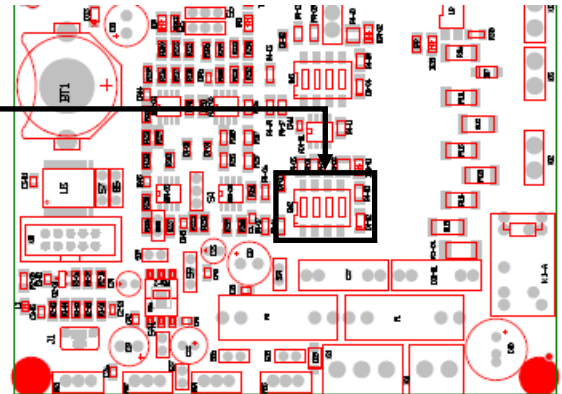
Mark	Intensity	Fuse function
F5	2A Temporised	Protection power supply L
F6	2A Temporised	Protection power supply N
F7	2A Temporised	Protection after transformer
F8	2A Temporised	Protection after transformer



ALL WORKS CONCERNED WITH ELECTRICAL INSTALLATION MUST BE CARRIED OUT BY A SKILLED AND QUALIFIED PERSONNEL



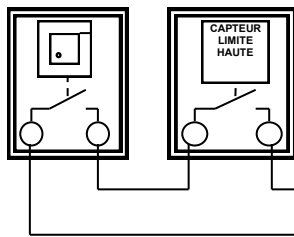
Use maximum 0.75 mm² flexible shielded cable for the connection of the control signal.



Dip-Switch SW2

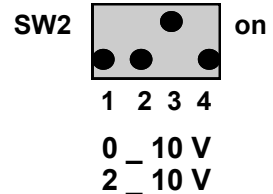
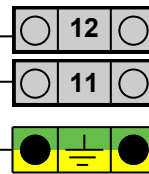
ON / OFF

Outside connections

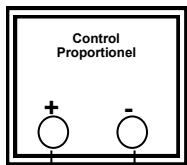


Connection with ON/OFF control humidistat, high level safety humidistat, ventilation system or a shunt.

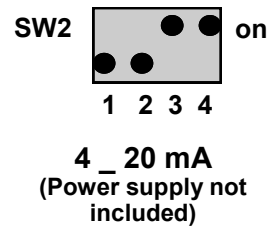
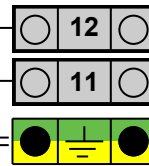
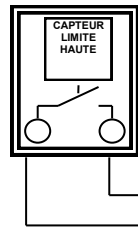
Electrical compartment



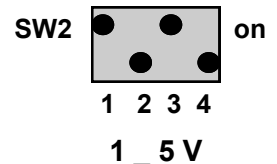
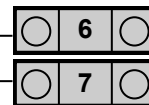
CONTROL PROPORTIONNEL



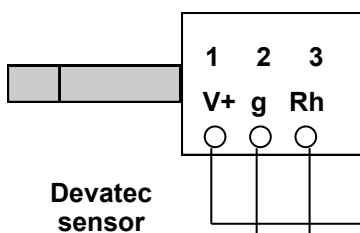
11-12 connection control humidistat high level safety humidistat, or (and) ventilation enslavement or a shunt.



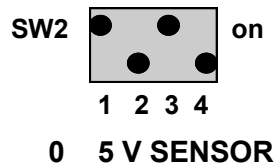
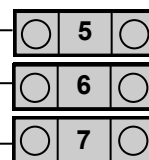
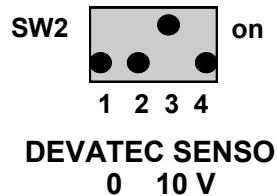
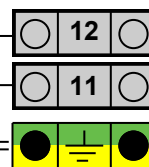
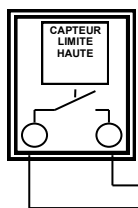
Caution: mind the signal polarity on connecting the control signal : (-) on terminal 6 and (+) on terminal 7. Reversing the polarity will damage the board.



HUMIDITY SENSOR



Devatec sensor

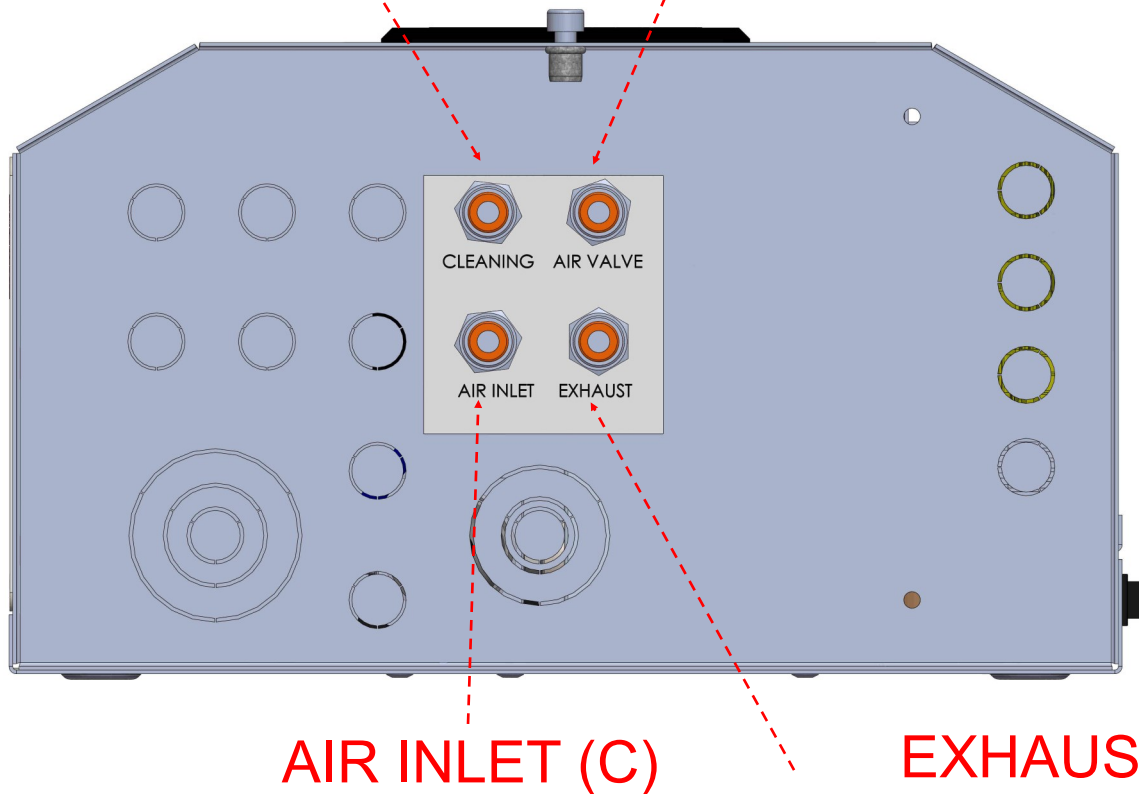


ALL WORKS CONCERNED WITH ELECTRICAL INSTALLATION MUST BE CARRIED OUT BY A SKILLED AND QUALIFIED PERSONNEL

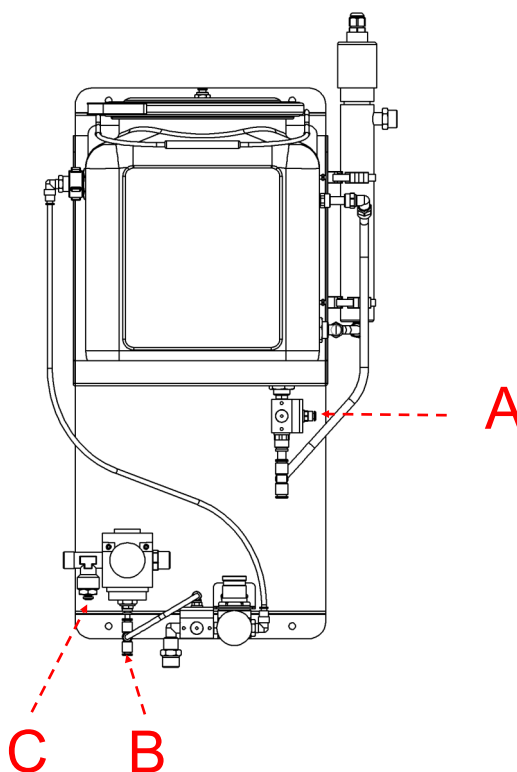
Pneumatic connection

CLEANING (A)

WATER VALVE (B)



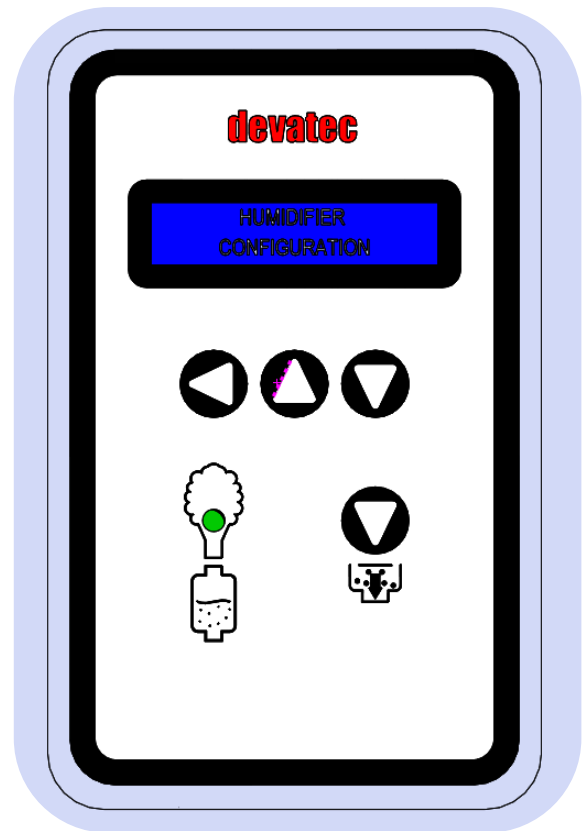
For BV nozzles connections,
See technical manual





Before putting your Control Cabinet in operation, please make sure that your installation is in conformity with the manufacturer's technical specifications.

- Make sure that terminals 1 & 2 are jumped (in case in there is no high limit switch) otherwise the Control Cabinet will not start up.
- Switch on the main power supply.
- Switch on I the I/O (on/off) rocker switch.



Control Cabinet identification label stuck under and shielded by the front panel polycarbonate label.

This identification label provides the following information : Control Cabinet, unit serial number, power

Fog System
Control Cabinet

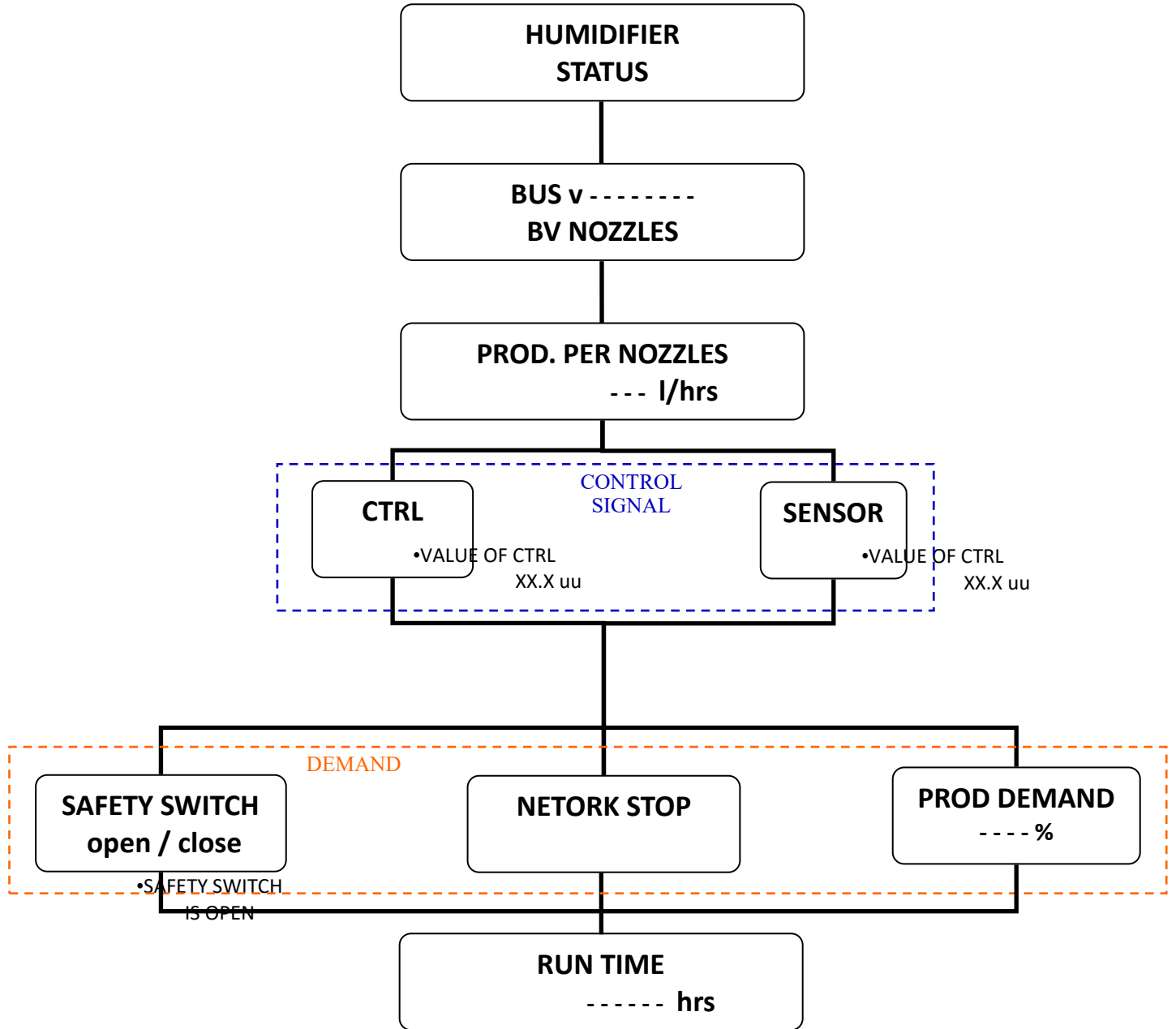
devatec
+33 2 35 83 06 44
www.devatec.com

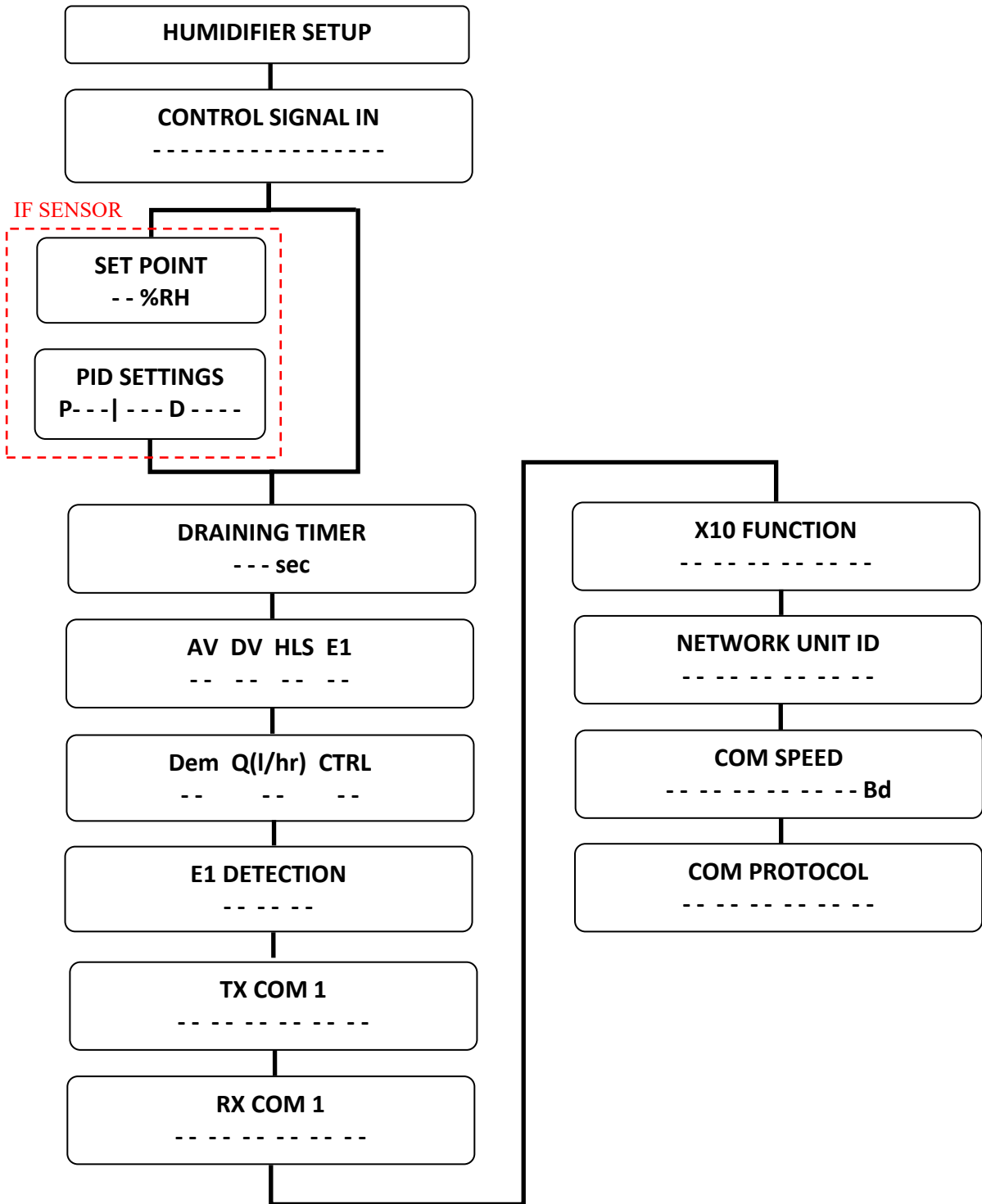
Model BUS BV

Rated Voltage 115V 230V 50-60 Hz

Rated Power 100W Ref :

Air Pressure Max: 8 bar







CONTROL CABINET

System management

Configuration changing menu

ATTENTION

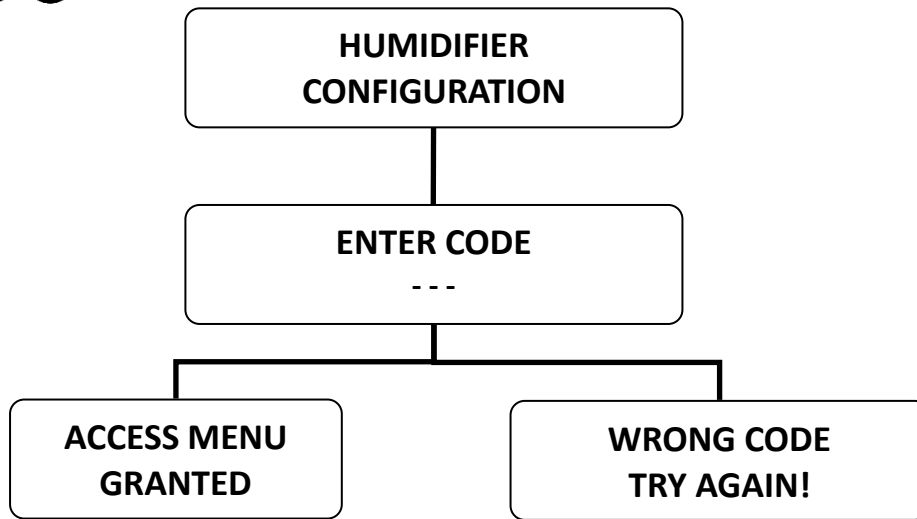
devatec

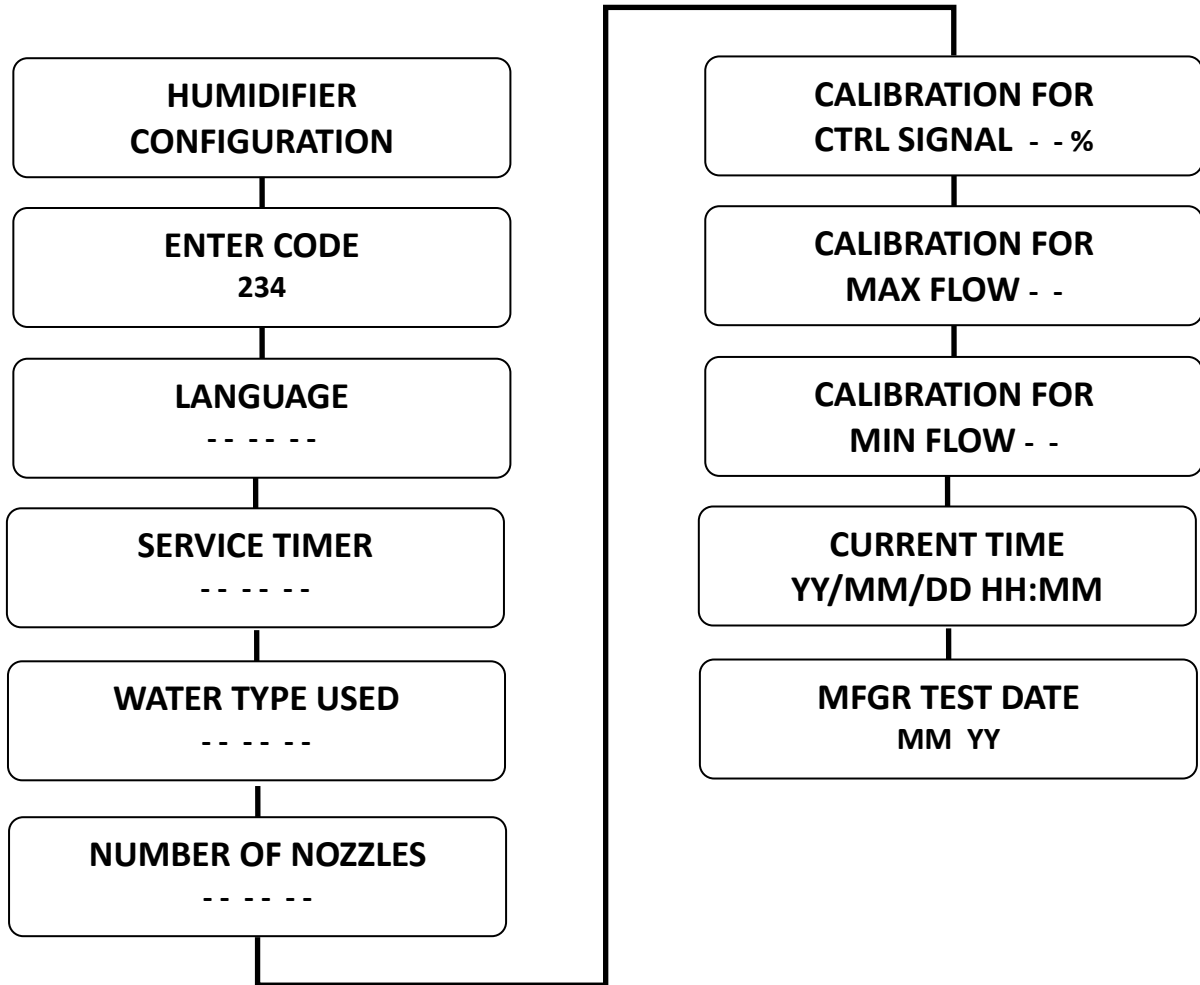


1 2 3



- A press on button 1 will allow you to shift to sub-menu for changing configuration parameters.
- Then scroll display using the up (2) or down (3) keys.
- The selected parameter will flash and press return key (1) for recording.





Default message



How to resolve this default

- Check your inlet air pressure to the manometer (From 2.5 to 4 bar)
- Check the filter regulator if it's not blocked
- Check if the inlet air is connected and opened
- Check if the compressor work correctly

Routine services

- After the control cabinet has run for about one hour time, check for any leakage
- A complete inspection of all the unit should be made after 50h after the first running and every year of operation. Any faulty or damaged parts must be replaced to work properly.

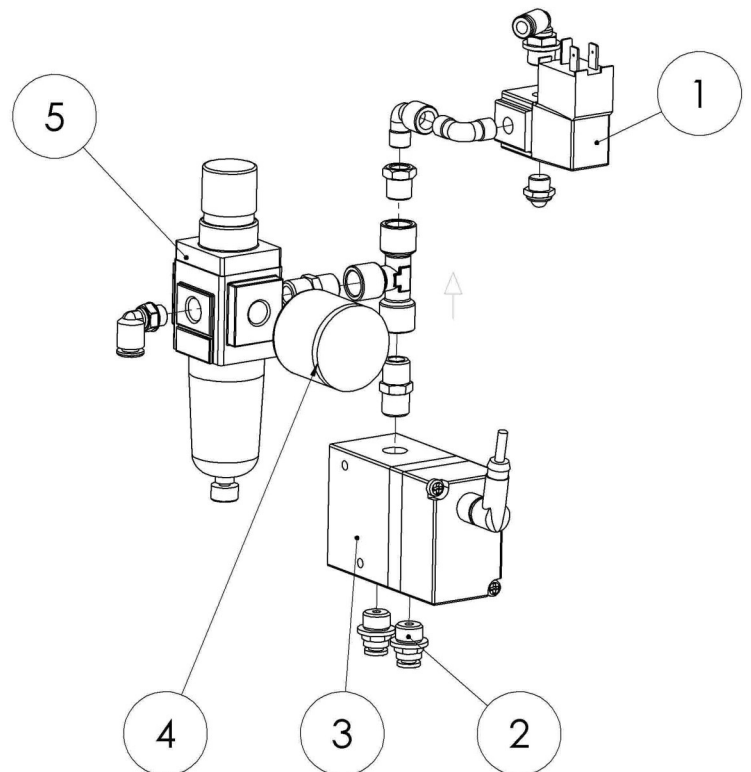
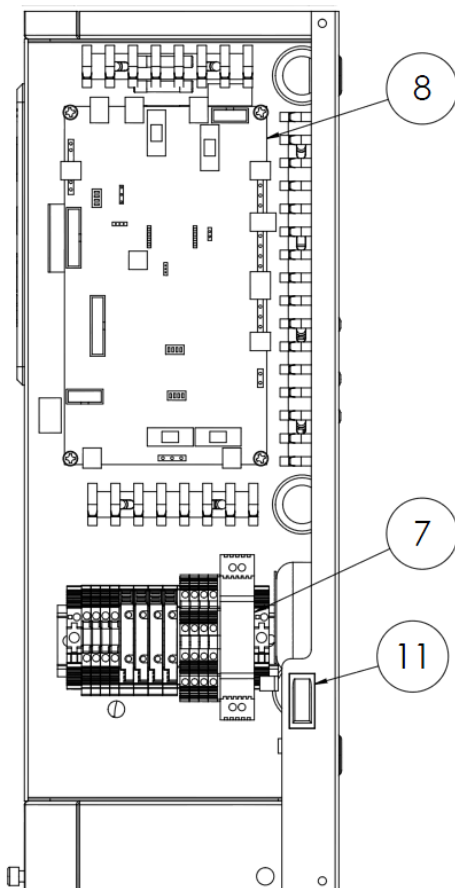
Caution

Always turn off the control cabinet before commencing any maintenance and refer to the instructions given in this manual.

The Control cabinet includes live electrical components. All maintenance must only be carried out by skilled and qualified personnel.



Rep	Code	Description
1	930310	Distributor 24VDC
2	930319	Quick connection 4/6
3	930311	Proportional solenoid valve
4	930263	Manometer
5	930267	Pressure gauge
7	930265	Power Supply 24VDC
8	930374	PCB Main Board
11	930100	Switch ON/OFF





**185 bd des Frères Rousseau
76550 Offranville - France**



Export division: tel. +33 (0)2 35 83 06 44
Email: export@devatec.com - www.devatec.com

France division : tel. 02 35 04 61 41
Email: france@devatec.com - www.devatec.com



devatec reserves the right to change specifications or design of the equipment described in this brochure without prior notice.