



Made in Italy

The products are in compliance with the provisions of the following directives:

- 2004/108 / EC

They respond in full or only to the parts applicable to the following standards:

- - CEI EN 61131-2

The EC Declarations of Conformity can be downloaded from
<http://catalogue.camozzi.com/Downloads.aspx?cat=19>

| | | |
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|  | Instruction manual Series D multipole size 4 | 5000029993 |
| | | Version 01 |

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1. Product identification



Conversion table for the production date.

86-1400-0001 Rev. D

Leaf 02 / 02

Position 1 and 2: n° of the week.

| | | | |
|----|----|----|----|
| 01 | 14 | 27 | 40 |
| 02 | 15 | 28 | 41 |
| 03 | 16 | 29 | 42 |
| 04 | 17 | 30 | 43 |
| 05 | 18 | 31 | 44 |
| 06 | 19 | 32 | 45 |
| 07 | 20 | 33 | 46 |
| 08 | 21 | 34 | 47 |
| 09 | 22 | 35 | 48 |
| 10 | 23 | 36 | 49 |
| 11 | 24 | 37 | 50 |
| 12 | 25 | 38 | 51 |
| 13 | 26 | 39 | 52 |

Example of composition.

03P

Description:

| | |
|-----------|------------|
| 03 | Week n° 03 |
| P | Year 2010 |

Position 3: One letter for the present Year.

| | | | | |
|----------|------|------|------|------|
| A | | 1996 | 2021 | 2046 |
| B | | 1997 | 2022 | 2047 |
| C | | 1998 | 2023 | 2048 |
| D | | 1999 | 2024 | 2049 |
| E | | 2000 | 2025 | 2050 |
| F | | 2001 | 2026 | 2051 |
| G | | 2002 | 2027 | 2052 |
| H | | 2003 | 2028 | 2053 |
| I | | 2004 | 2029 | 2054 |
| K | | 2005 | 2030 | 2055 |
| L | | 2006 | 2031 | 2056 |
| M | | 2007 | 2032 | 2057 |
| N | | 2008 | 2033 | 2058 |
| O | | 2009 | 2034 | 2059 |
| P | | 2010 | 2035 | 2060 |
| Q | | 2011 | 2036 | 2061 |
| R | | 2012 | 2037 | 2062 |
| S | 1988 | 2013 | 2038 | 2063 |
| T | 1989 | 2014 | 2039 | 2064 |
| U | 1990 | 2015 | 2040 | 2065 |
| V | 1991 | 2016 | 2041 | 2066 |
| W | 1992 | 2017 | 2042 | 2067 |
| X | 1993 | 2018 | 2043 | 2068 |
| Y | 1994 | 2019 | 2044 | 2069 |
| Z | 1995 | 2020 | 2045 | 2070 |

Managing authority:

Industrial Engineering

Date:


9 April 2010

Created by:

Marco Bontempi

Approved by:

Bruno Ghizzardi

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2. General recommendation

Please respect the recommendations for safe use described in this document.


- Some hazards can be associated with the product only after it has been installed on the machine / equipment. The end user is responsible for identifying these dangers and reducing the risks associated with them.
- The products covered by this manual can be used in circuits that must comply with EN ISO 13849-1.
- For information regarding the reliability of the components, contact Camozzi.
- Before using the product, carefully read the information contained in this document.
- Keep this document in a safe and handy place throughout the life cycle of the product.
- Transfer this document to any subsequent holder or user.
- The instructions contained in this manual and further information can be found using the following references:

o Website <http://www.camozzi.com>

o Camozzi general catalog

o Technical assistance service

- Assembly and commissioning must only be carried out by qualified and authorized personnel, according to these instructions.
- It is the responsibility of the system / machinery designer to correctly choose the most appropriate component according to the required use.
- The use of suitable protections is recommended to minimize the risk of personal injury.
- For all those situations of use not covered in this manual and in situations where damage to property, persons or animals could be caused, contact Camozzi first.
- Do not carry out unauthorized modifications on the product. In this case, any damage caused to people or animals is to be considered the responsibility of the user.
- It is recommended to comply with all the safety regulations affected by the product.
- Do not intervene on the machine / system unless after checking that the working conditions are safe.
- Before installation or maintenance, make sure that the specific safety lockout positions are activated, then cut off the power supply (if necessary) and the pressure supply of the system, discarding all the residual compressed air present in the system and deactivating the residual energy stored in springs, condensers, receptacles and gravity.
- After installation or maintenance, it is necessary to reconnect the pressure and electrical supply (if necessary) of the system and check the regular operation and tightness of the product. In the event of a leak or malfunction, the product must not be put into operation.
- The product can be put into operation only in compliance with the specifications indicated, if these specifications are not respected the product can be put into operation only after authorization by Camozzi.
- Avoid covering the appliances with paints or other substances that reduce heat dissipation.

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3. General characteristics and conditions of use

PNEUMATIC

| | |
|---------------------|---|
| Valve type | Spool with seals 5/2 monostable e bistable |
| Valve functions | 2x3/2 NC 2x3/2 NO 1x3/2 NC+1x3/2 NO 5/3 CC – CP – CO |
| Material | Spool: AL - spool seals: HNBR - other seals: NBR - body: AL - bottoms: technopolymer - sub-base: AL |
| Connection | Outlet 2 e 4: thread G3/8 or fitting with max. tube size 14 Inlet 1: thread G1/2 or fitting with max. tube size 16 Exhaust 3 e 5: thread G1/2 or fitting with max. tube size 16 or integrated silencer. Inlet 12/14 and exhaust 82/84: thread G1/8 or fitting with max. tube size 8 |
| Temperature | 0 ÷ 50 °C |
| Air Characteristics | Filtered and non-lubricated compressed air in class 6.4.4 according to ISO 8573-1: 2010. If lubrication is required, use only oils with max. Viscosity. 32 Cst and the version with external servo pilot. The air quality to the servo pilot must be in class 7.4.4 according to ISO 8573-1: 2010 (do not lubricate). |
| Valve Size | 25 mm |
| Working pressure | -0.9 ÷ 10 bar |
| Pilot pressure | 2,5 ÷ 7 bar 4,5 ÷ 7 bar (with working pressure above 6 bar for 2x3/2 version) |
| Valve flow | 2000 NI/min |
| Mounting position | everyone |
| IP protection | IP65 |

ELETTRIC

| | |
|-----------------------|--|
| D-Sub Connector | 25 o 44 poles |
| Max Power consumption | 1,5 A |
| Supply voltage | 24 V DC +/-10% |
| Max coils | 22 coils on 11 valve positions (with 25-pin Sub-D connector) 38 coils on 19 valve positions (with 44-pin Sub-D connector) |
| Switching valve | Yellow led |
| Fault detection led | Red led |
| Operation status LED | Green led - WLAN operation, power supply present |
| Electropilot power | 1W (Power reduction to 0,3W after 100 ms) |

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4. Product storage and transport

- Adopt all measures possible to avoid accidental damage to the product during transport, and when available use the original packaging.
- Observe the specified storage temperature range of $-10 \div 50$ °C.

5. System description


The D Series is a valve island equipped with COILVISION technology that allows you to monitor and predict the state of wear and efficiency of some parts of the individual solenoid valves. Through this monitoring and predictive diagnostics system it is possible, for example, to know the electricity consumption and the possible overheating of the coil. The detected data, alarms and health status can be transmitted via cable to a PLC or via WLAN to an IIoT Gateway for subsequent sending to the Cloud. The D Series is suitable for use in applications with limited installation space without penalizing the flow rate.

Available with connection integrated in a D-sub connector, it allows to cover the needs of all industrial applications.

COILVISION technology has been developed to constantly monitor the functional parameters of the electropilot which operates the spool via air. Each actuation of the electropilot, in different cyclic configurations and environmental conditions, is analyzed to acquire information which, processed by software algorithms, allows to diagnose and predict the health of the component.

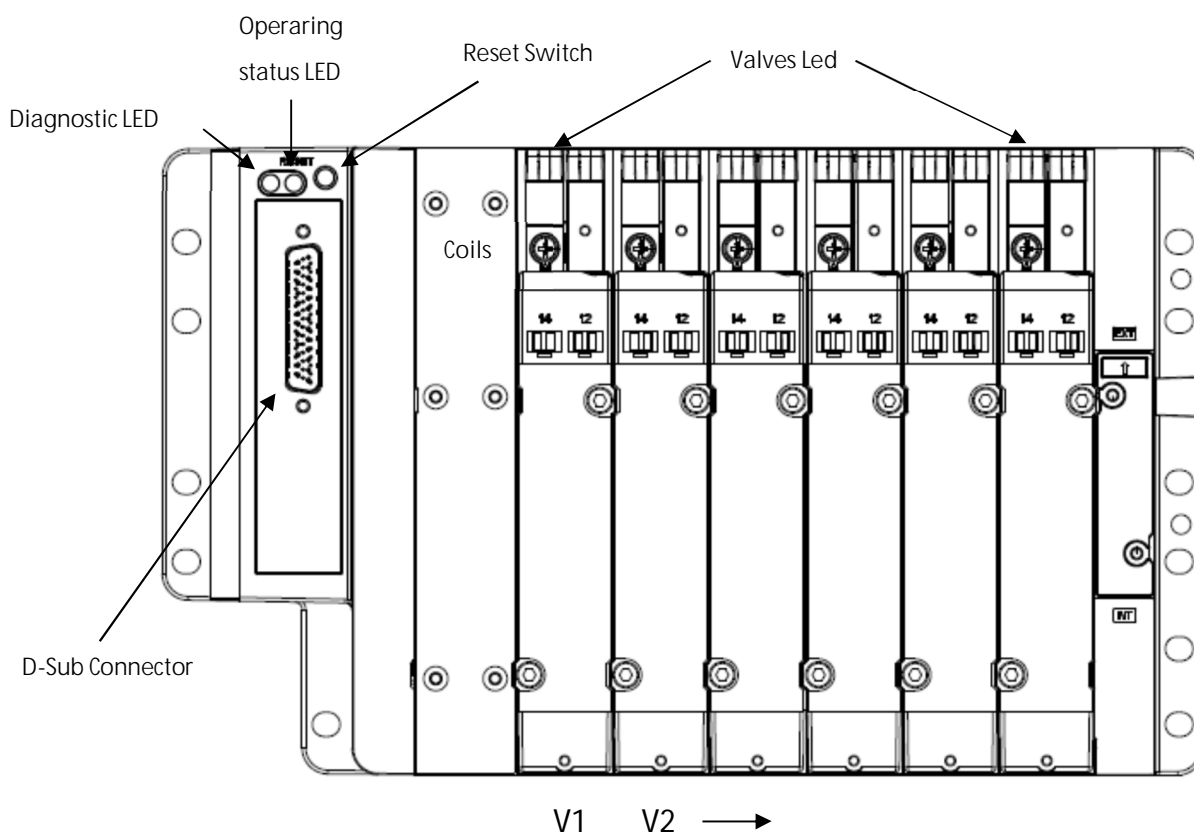
6. Installation and commissioning

- During the unpacking phase, be very careful not to damage the product.
- Check for damage due to transportation or storage of the product.
- Separate the packaging materials in order to allow their recovery or disposal in compliance with the regulations in force in your country.
- Before putting the component into operation, check that the declared characteristics and performances correspond to those required.
- During the installation of the component, provide for specific surge protection devices.
- During the installation of the component, check that there is no danger due to mechanical movements.
- Install the component in an area where the set-up and maintenance phases are easily performed and cannot create dangers for the operator.
- Close any unused connections with the appropriate covers or protective caps, in the case of the 3/5 and 82/84 exhaust channels with appropriate silencers.
- The components must be fixed correctly, using the appropriate anchors, where available, and checking that the fixing remains effective even in the presence of high cycles or strong vibrations. In presenza di forti vibrazioni prevedere appositi dispositivi/sistemi in grado di attutirne l'effetto sul componente.

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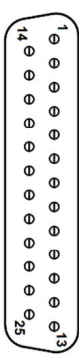
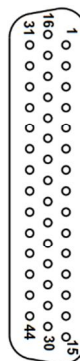
- Provide for the installation of dehumidifiers in order to avoid the formation of humidity and condensation in the internal components.
- If the device is used to operate an actuator whose accidental movement can generate a hazard, provide for appropriate locking devices for the moving part of the actuator.
- Make sure the connectors are connected and fastened correctly.
- Use only power supplies capable of ensuring safe electrical disconnection of the voltage supply according to IEC 742 / EN 60742 / VDE 0551 with a minimum insulation resistance of 4 kV Protected Extra Low Voltage (PELV).
- It is the user's task to adopt the necessary measures to prevent damage to the system caused by non-periodic overvoltage peaks on the power lines following power cuts on high energy equipment.
- Voltage interruptions are allowed according to the PS2 severity level.
- Before any maintenance, service and/or simple contact with metal points and metal surfaces accessible by the user, for example the fixing screws, make sure that the operator and/or the tool are not a vehicle of electrostatic discharges (operationally it is enough to touch a surface or a ground conductor before operating on the device).

6.1 Connecting and signaling elements



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6.2 Electrical connection

| 25 poles | Pin | Cables Color G25X1 | Function | 44 poles | Pin | Cables Color G44X1 | Function |
|--|-----|--------------------|------------------------|---|-----|--------------------|------------------------|
|  | 1 | WHITE | Valve 1 – Solenoid 14 |  | 1 | WHITE | Valve 1 – Solenoid 14 |
| | 2 | BROWN | Valve 1 – Solenoid 12 | | 2 | BROWN | Valve 1 – Solenoid 12 |
| | 3 | GREEN | Valve 2 – Solenoid 14 | | 3 | GREEN | Valve 2 – Solenoid 14 |
| | 4 | YELLOW | Valve 2 – Solenoid 12 | | 4 | YELLOW | Valve 2 – Solenoid 12 |
| | 5 | GREY | Valve 3 – Solenoid 14 | | 5 | GREY | Valve 3 – Solenoid 14 |
| | 6 | PINK | Valve 3 – Solenoid 12 | | 6 | PINK | Valve 3 – Solenoid 12 |
| | 7 | BLUE | Valve 4 – Solenoid 14 | | 7 | BLUE | Valve 4 – Solenoid 14 |
| | 8 | RED | Valve 4 – Solenoid 12 | | 8 | RED | Valve 4 – Solenoid 12 |
| | 9 | BLACK | Valve 5 – Solenoid 14 | | 9 | BLACK | Valve 5 – Solenoid 14 |
| | 10 | VIOLET | Valve 5 – Solenoid 12 | | 10 | VIOLET | Valve 5 – Solenoid 12 |
| | 11 | GREY/PINK | Valve 6 – Solenoid 14 | | 11 | GREY/PINK | Valve 6 – Solenoid 14 |
| | 12 | RED/BLUE | Valve 6 – Solenoid 12 | | 12 | RED/BLUE | Valve 6 – Solenoid 12 |
| | 13 | WHITE/GREEN | Valve 7 – Solenoid 14 | | 13 | WHITE/GREEN | Valve 7 – Solenoid 14 |
| | 14 | BROWN/GREEN | Valve 7 – Solenoid 12 | | 14 | BROWN/GREEN | Valve 7 – Solenoid 12 |
| | 15 | WHITE/YELLOW | Valve 8 – Solenoid 14 | | 15 | WHITE/YELLOW | Valve 8 – Solenoid 14 |
| | 16 | YELLOW/BROWN | Valve 8 – Solenoid 12 | | 16 | YELLOW/BROWN | Valve 8 – Solenoid 12 |
| | 17 | WHITE/GREY | Valve 9 – Solenoid 14 | | 17 | WHITE/GREY | Valve 9 – Solenoid 14 |
| | 18 | GREY/BROWN | Valve 9 – Solenoid 12 | | 18 | GREY/BROWN | Valve 9 – Solenoid 12 |
| | 19 | WHITE/PINK | Valve 10 – Solenoid 14 | | 19 | WHITE/PINK | Valve 10 – Solenoid 14 |
| | 20 | PINK/BROWN | Valve 10 – Solenoid 12 | | 20 | PINK/BROWN | Valve 10 – Solenoid 12 |
| | 21 | WHITE/BLUE | Valve 11 – Solenoid 14 | | 21 | WHITE/BLUE | Valve 11 – Solenoid 14 |
| | 22 | BROWN/BLUE | Valve 11 – Solenoid 12 | | 22 | BROWN/BLUE | Valve 11 – Solenoid 12 |
| | 23 | WHITE/RED | Diagnostic output | | 23 | WHITE/RED | Valve 12 – Solenoid 14 |
| | 24 | BROWN/RED | + 24Vdc | | 24 | BROWN/RED | Valve 12 – Solenoid 12 |
| | 25 | WHITE/BLACK | Negative Common | | 25 | BIANCO/NERO | Valve 13 – Solenoid 14 |
| <p>NOTE:</p> <p>* It is suggested to connect all the not used wired to the same negative common of the power supply (Pin 25 for 25 pins D-sub version and 43/44 pins for the 44 pins D-sub version)</p> <p>* Before any maintenance, service and/or simple contact with metal points and metal surfaces accessible by the user, for example the fixing screws, make sure that the operator and/or the tool are not a vehicle of electrostatic discharges (operationally it is enough to touch a surface or a ground conductor before operating on the device).</p> | | | | | 26 | BROWN/BLACK | Valve 13 – Solenoid 12 |
| | | | | | 27 | GREY/GREEN | Valve 14 – Solenoid 14 |
| | | | | | 28 | YELLOW/GREY | Valve 14 – Solenoid 12 |
| | | | | | 29 | PINK/GREEN | Valve 15 – Solenoid 14 |
| | | | | | 30 | YELLOW/PINK | Valve 15 – Solenoid 12 |
| | | | | | 31 | GREEN/BLUE | Valve 16 – Solenoid 14 |
| | | | | | 33 | YELLOW/BLUE | Valve 16 – Solenoid 12 |
| | | | | | 33 | GREEN/RED | Valve 17 – Solenoid 14 |
| | | | | | 34 | YELLOW/RED | Valve 17 – Solenoid 12 |
| | | | | | 35 | GREEN/BLACK | Valve 18 – Solenoid 14 |
| | | | | | 36 | YELLOW/BLACK | Valve 18 – Solenoid 12 |
| | | | | | 37 | GREY/BLUE | Valve 19 – Solenoid 14 |
| | | | | | 38 | PINK/BLUE | Valve 19 – Solenoid 12 |
| | | | | | 39 | GREY/RED | Diagnostic output |
| | | | | | 40 | PINK/RED | Not used |
| | | | | | 41 | GREY/BLACK | +24 Vdc |
| | | | | | 42 | PINK/BLACK | |
| | | | | | 43 | BLUE/BLACK | Negative common |
| | | | | | 44 | RED/BLACK | |

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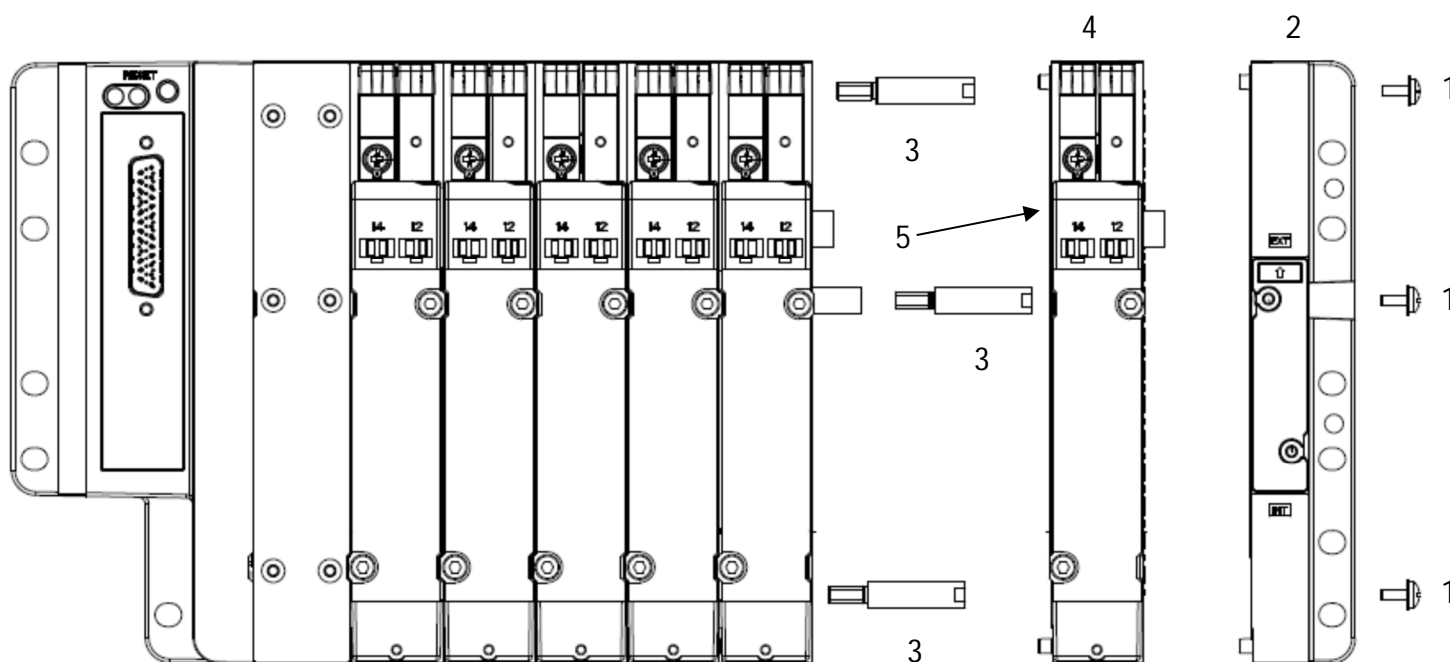
6.3 Electrical characteristics

The multipolar D Series valve island requires a fixed 24Vdc (+/- 10%) power supply that is made through pins 24 (+) and 25 (-) of the 25-pin D-sub connector or pins 41-42 (+) and 43-44 (-) of the 44-pole connector.

The signals for activating the solenoid valves are PNP type, it is possible to activate a maximum of 22 solenoid pilots on 11 valve positions in the version with 25-pole connector and a maximum of 38 solenoid pilots on 19 valve positions in the version with 44-pole connector.

The multipolar D Series has a digital output (Pin 23 of the D-sub 25-pole connector or pin 40 of the D-sub 44-pole "open collector" diagnostic connector, the connection of the diagnostic output is optional

6.4 Adding a valve position or changing their position.



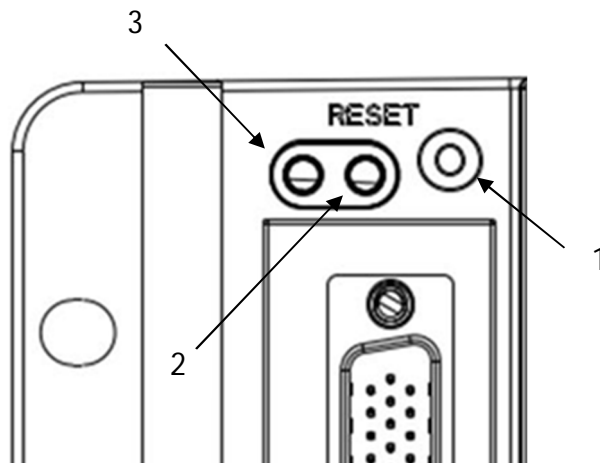
If it is necessary to add a valve position:

- Unscrew the screws (1) closing the right terminal (2) and open the valve pack
- Screw the tie rods in a single position up to the stop on the tie rods in the sub-bases (3)
- Insert the sub-base (4) on the tie rods paying attention to the connection between the card and the edgecard connector (5) and the correct positioning of the interface gasket between the sub-bases.
- Reassemble the right terminal (2) and tighten the screws (1) with **tightening torque 5 N.m**
- Screw the Series D valves onto the sub-bases with a tightening torque of 2,5 N.m**

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6.5 Procedure for numbering the sub-bases / valve positions

The numbering procedure must be carried out in all those cases in which the sub-bases are added, removed or moved




To proceed with the numbering of the valve positions it is necessary to:

- a. Disconnect the power supply
- b. Remove the cap that covers the Reset button (1)
- c. Using a thin tip screwdriver, press and hold the Reset button
- d. Switch on the power and keep the Reset button pressed for 3 seconds
- e. Replace the cap that covers the Reset button (1)

Successful numbering is signaled by the simultaneous flashing of the LEDs on the sub-bases and the LED operating status (2)

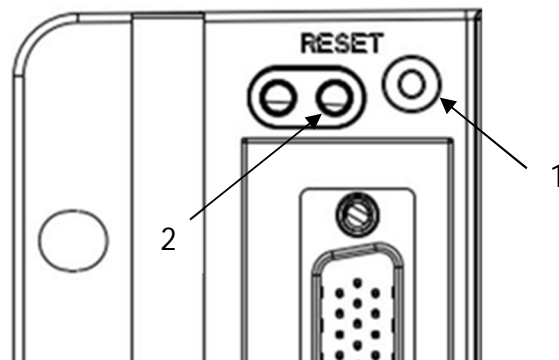
Otherwise, that is, if the numbering was not correctly done, the red diagnostic LED (3) will light up, and the LED of the last valve position correctly numbered.

NOTE: Before any maintenance, service and/or simple contact with metal points and metal surfaces accessible by the user, for example the fixing screws, make sure that the operator and/or the tool are not a vehicle of electrostatic discharges (operationally it is enough to touch a surface or a ground conductor before operating on the device).

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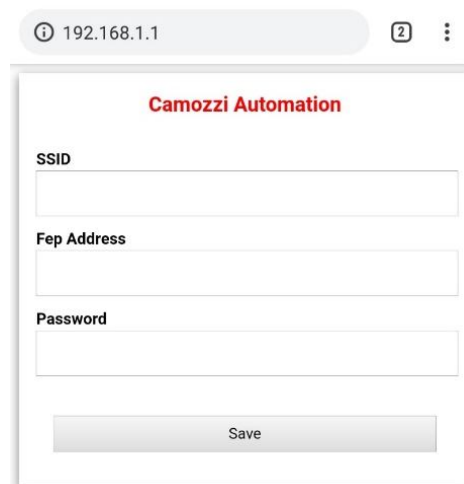
6.7 WLAN connection procedure:

Before connecting a D-Series island to a WLAN, it is necessary to have read the information and followed the instructions in "5000024829 - User manual UVIX.pdf" downloadable from the site <http://catalogue.camozzi.com/Downloads.aspx?cat=205>




The following steps are necessary to configure the WLAN connection:

- Check that the letter W is present in the sixth position of the code, e.g. DMC.W ...
- Remove the cap that covers the Reset button (1)
- Provide power to the island (operating status LED (2) flashing green), press the Reset button for at least 5 seconds.
- The island is configured as an Access Point and generates the "CamoZZiWiFi" WLAN network.
- Using a PC or portable device, connect to the "CamoZZiWiFi" network, access with the password "!! camozzi"
- Open a browser and connect to the address 192.168.1.1, where the following page (mini-app) will appear:



The screenshot shows a web browser window with the address bar displaying '192.168.1.1'. The page title is 'CamoZZi Automation'. The main content area contains three input fields: 'SSID', 'Fep Address', and 'Password'. Below these fields is a 'Save' button.

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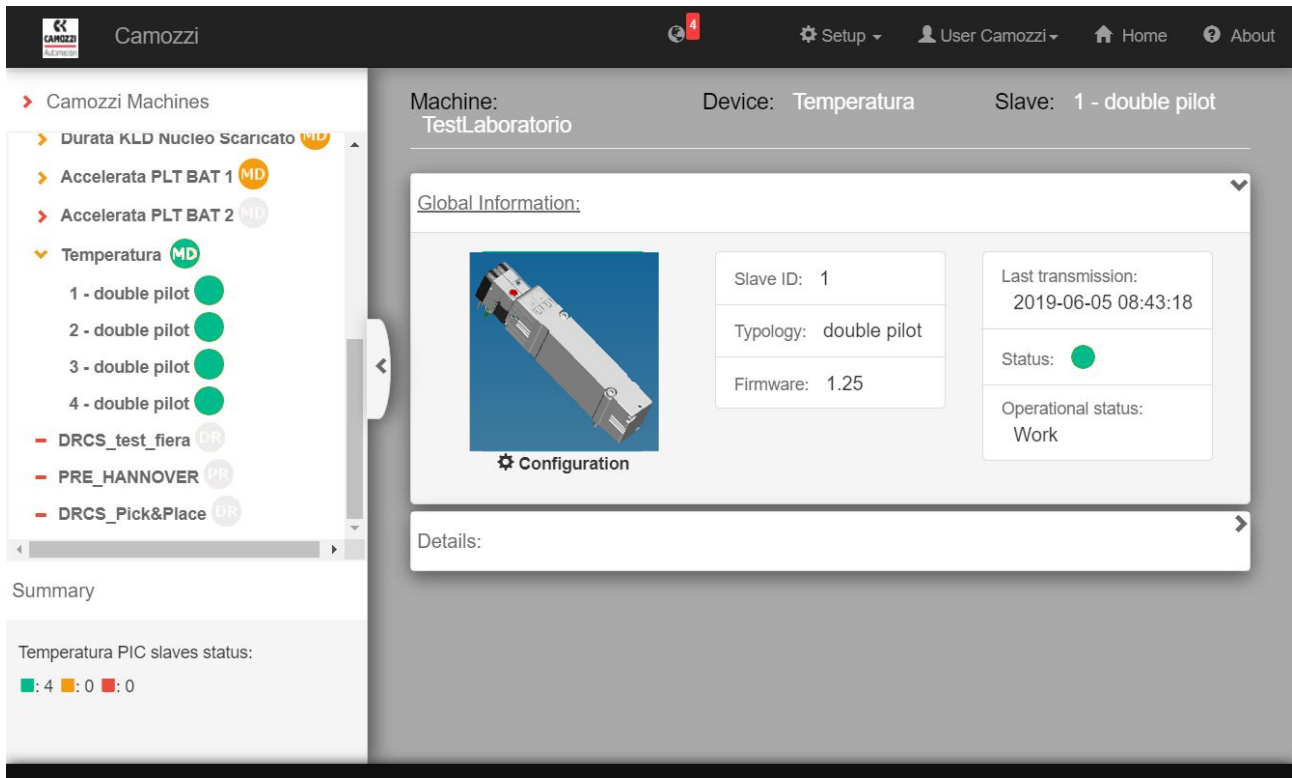
- g. Enter the credentials of the network to which you want to connect the island, for example:
 - a. SSID: camozziUVIX
 - b. FEP ADDRESS: 192.168.0.5
 - c. PASSWORD: camozziUVIX
- h. The valve island is configured as a Client and connects to the network for data transmission.
- i. Replace the cap that covers the Reset button (1)

COILVISION. DESCRIPTION OF THE PREDICTIVE DIAGNOSTIC SYSTEM AND DATA COLLECTION

The D Series valve island is able to send data, alarms and the health status of individual solenoid pilots via WLAN, allowing them to be monitored and predicted for wear and efficiency.

The data collected through an IoT Gateway are routed to the supervisory system called Camozzi UVIX.

CamoZZi UVIX is a software supervisor that can be installed on a PC or on a server inserted in a corporate network and accessible from other PCs. It allows you to view all the information of a network of Camozzi devices and all the data collected: from the general characteristics of the island (number of island valves, valve type) up to the health status of the individual valve (gauge indicator or alarm indicator).




The screenshot displays the Camozzi UVIX software interface. The top navigation bar includes the Camozzi logo, a notification icon with the number 4, and links for Setup, User Camozzi, Home, and About. The left sidebar shows a tree view of 'CamoZZi Machines' with categories like 'Durata KLD Nucleo Scaricato', 'Accelerata PLT BAT 1', 'Accelerata PLT BAT 2', and 'Temperatura'. The 'Temperatura' category is expanded, showing four 'double pilot' units, each with a green status indicator. Below this is a 'Summary' section for 'Temperatura PIC slaves status' showing 4 green, 0 yellow, and 0 red indicators.

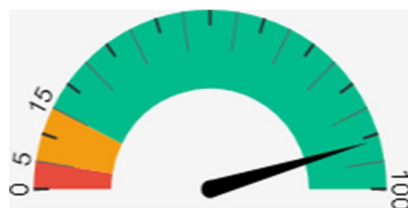
The main content area displays details for 'Machine: TestLaboratorio', 'Device: Temperatura', and 'Slave: 1 - double pilot'. A 'Global Information' panel includes a device image, a 'Configuration' gear icon, and a table of device details:

| | |
|------------------------|--|
| Slave ID: 1 | Last transmission: 2019-06-05 08:43:18 |
| Typology: double pilot | Status: ● |
| Firmware: 1.25 | Operational status: Work |

Below the global information is a 'Details' section with a right-pointing arrow.

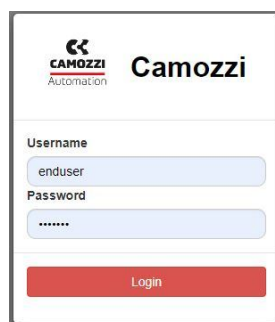
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The information on the health status of the individual solenoid valves mounted on the island is displayed by means of a gauge indicator with decreasing percentage based on a predictive algorithm.




7. CamozziUVIX: Series D configuration

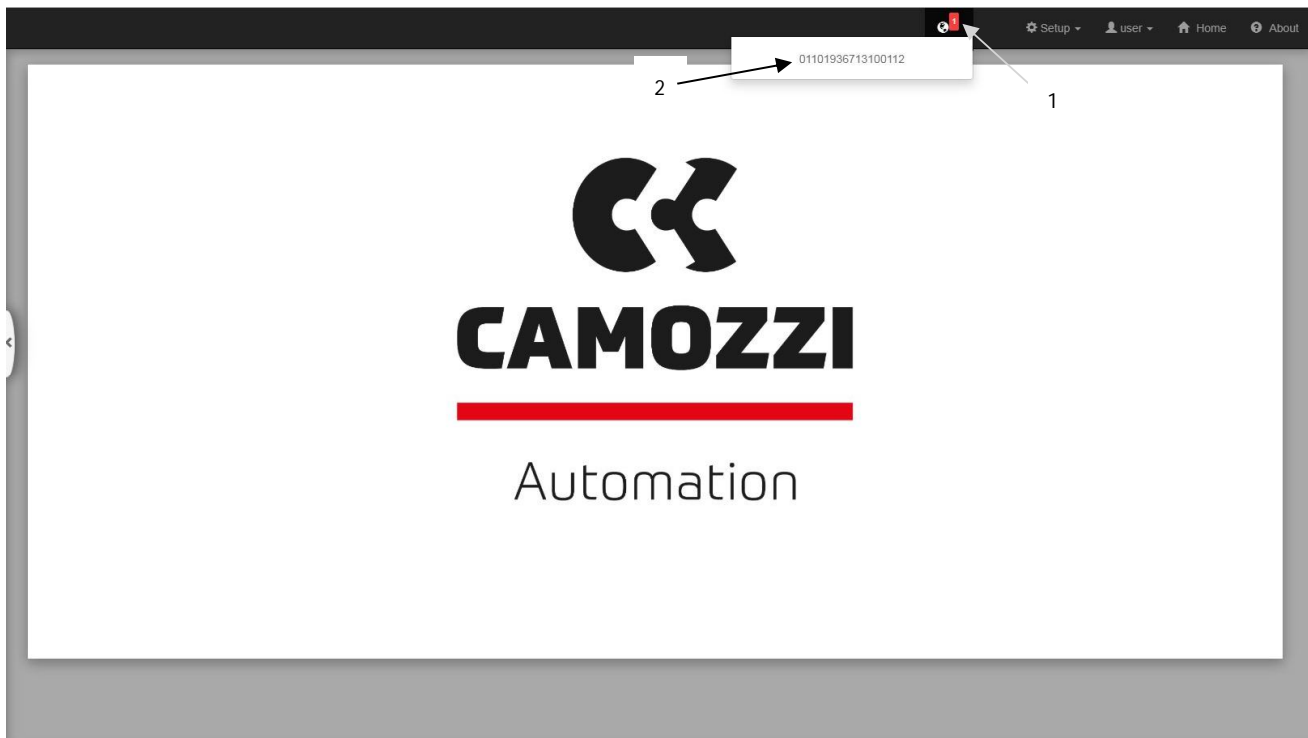
7.1 Access to CamozziUVIX:



Access to CamozziUVIX can take place in "View" mode using the "enduser" user and the "enduser" password or in "Configuration" mode using the "user" user and the "customer" password.

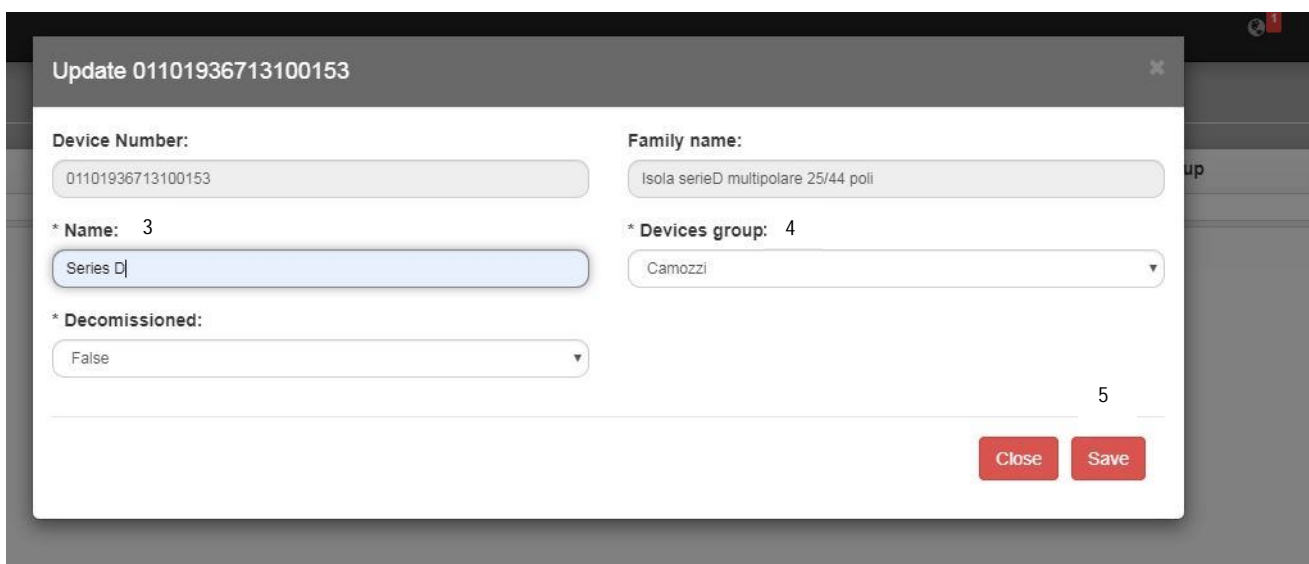
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7.2 : Assignment of the name and group to the Series D valve island



The system signals the presence of a new Series D island connected to the WLAN network click on the icon (1) to display the Serial number of the Series D island.

Click on the Serial number (2) to open the configuration screen



The screenshot shows the 'Update 01101936713100153' configuration window. It contains the following fields and controls:

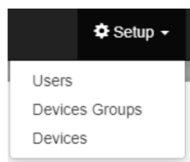
- Device Number:** 01101936713100153
- Family name:** Isola serieD multipolare 25/44 poli
- * Name:** 3 (with a text input field containing 'Series D')
- * Devices group:** 4 (with a dropdown menu showing 'CamoZZi')
- * Decomissioned:** False (with a dropdown menu)
- Buttons:** Close and Save (labeled 5)

Assign an identifier to the device in the "Name" window (3)

Assign the device to a "Devices Group" (4) that must have been previously created

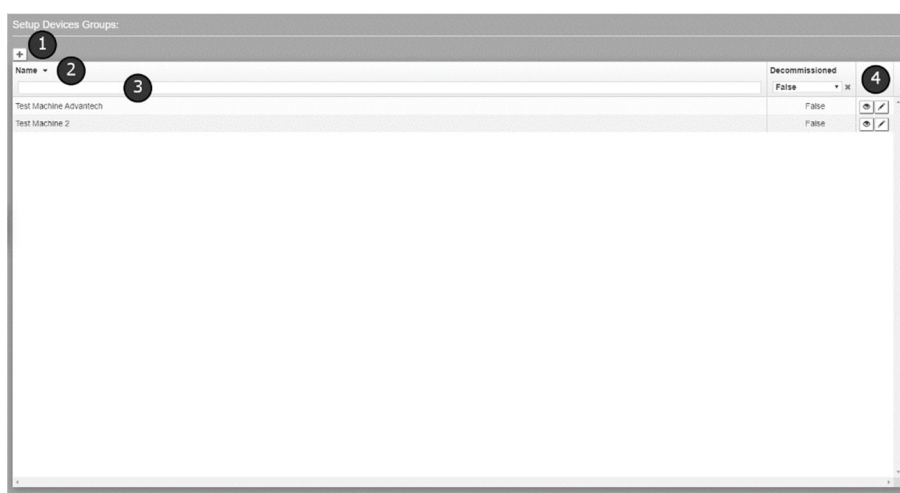
Save the configuration (5)

NOTE: Instructions for creating a Device Group (from file: 5000024829 - User manual UVIX.pdf)



Click on the Setup icon and select the "Devices Group" item

- **Devices Groups:** it is possible to add new device groups by specifying their name, or view and / or modify the device groups already present in the master data.



| Description | |
|-------------|--|
| 1 | Button for creating a new group of devices |
| 2 | Button for ascending / descending alphabetical sorting |
| 3 | Filter of the values contained in the relative column |
| 4 | Buttons for viewing the details of the device group or changing its properties |

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Once the button **[1]** has been pressed, the following screen will be displayed:



Figura 14 – Devices group

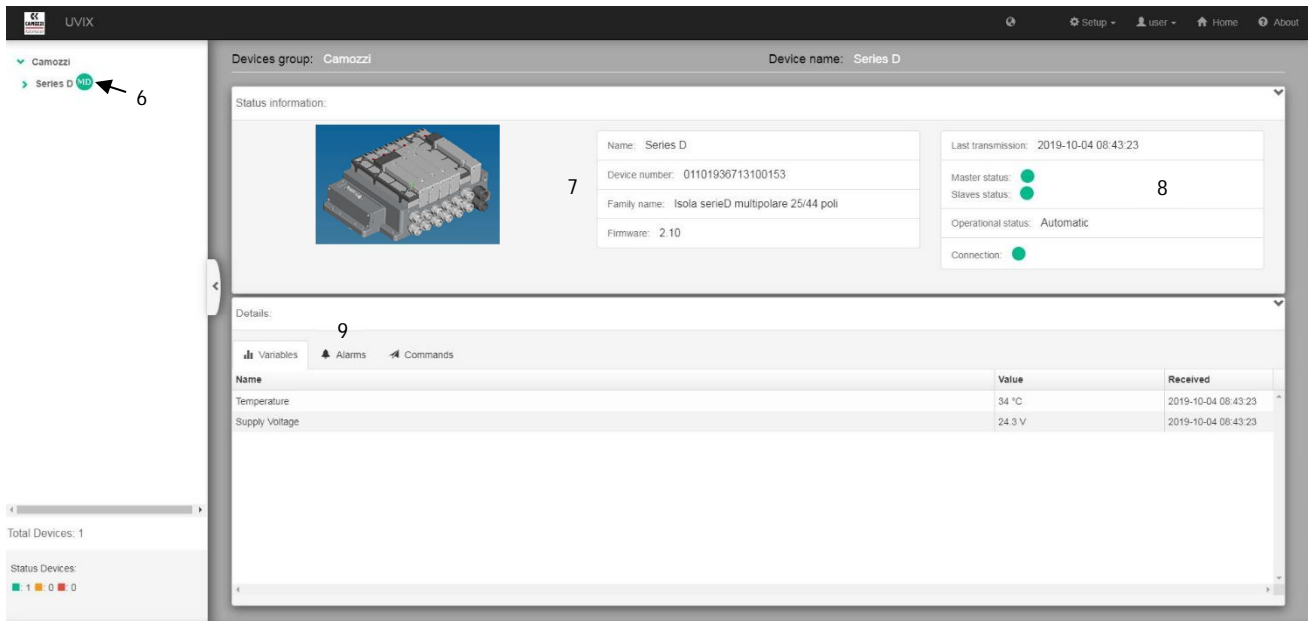
After entering the required information (the mandatory ones are indicated with "*"), you can conclude the insertion of the new group of devices by clicking on the "Save" button located at the bottom right.

If the data is incorrect, the wrong fields are highlighted and a note describes the problem.

By selecting "TRUE" under "Decommissioned", the selected group of devices will no longer be available (and therefore will no longer be displayed in the left bar) while remaining present in the master data.

By pressing the display and / or edit buttons **[4]**, a screen similar to the previous one will be displayed.

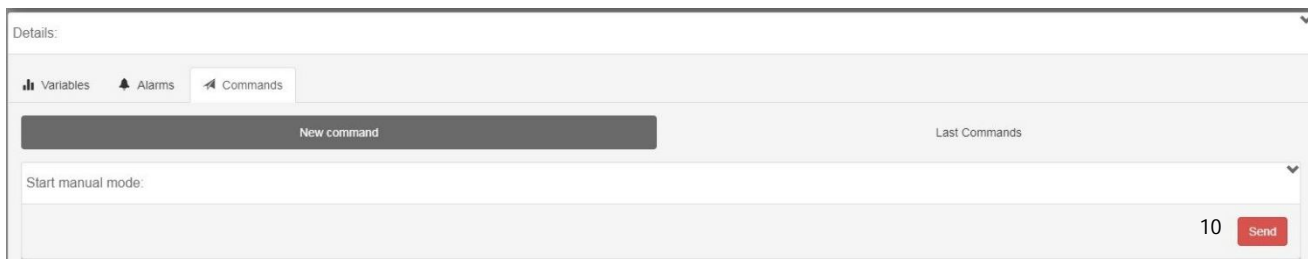
7.3: General information and valve island status



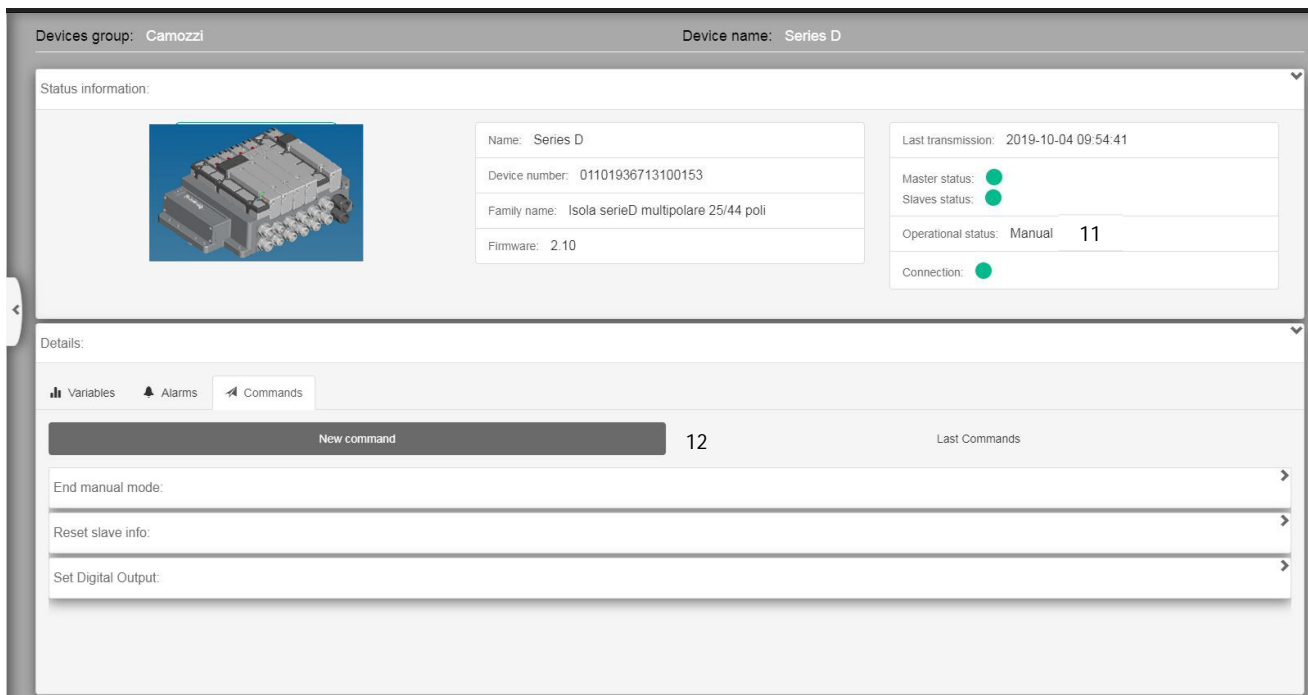
The connected Series D valve island is displayed in the list of devices (6) on the left side of the screen. Click on the name to view the relative screen with general information (7), the status of the island (8), the "tabs" (9) for viewing:

- Temperature and supply voltage of the Series D island
- the status of the valve island alarms (see chapter "8. Fault identification"> Table "Master LED behavior")
- Controls (visible only if the access was made in "user" mode)

7.4 : Commands for configuring the valve island (only with "user" access)



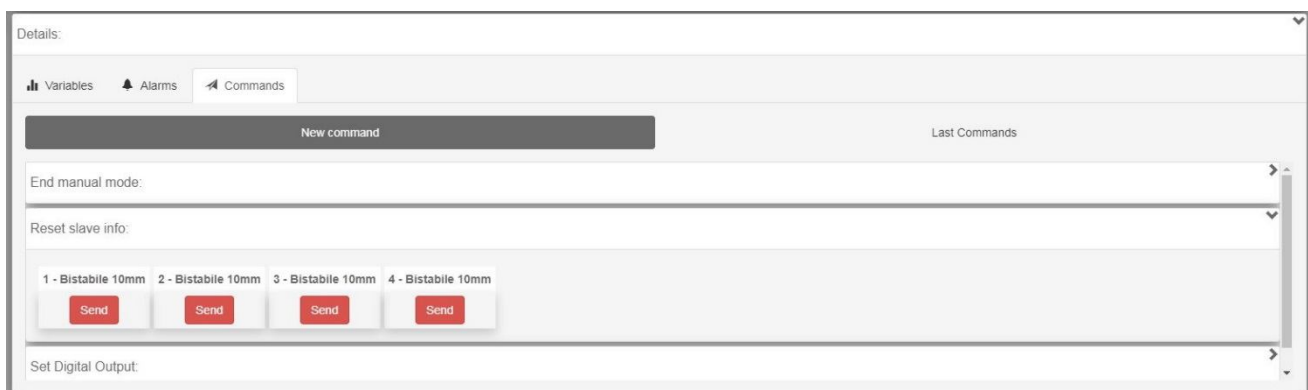
After selecting the "Tab Comands" click on the "Send" button (10) to bring the Series D valve island to "Manual" mode



The valve island switches to manual mode (11) and the controls (12) appear on the screen

7.4.1 End manual mode: returns the valve island to the "automatic" state

7.4.2 Reset slave info: resets the state of health and the number of cycles performed by the valve which is mounted on a sub-base (see paragraph 7.5)



Click on the "Send" button (12) to reset the information saved in the sub-base

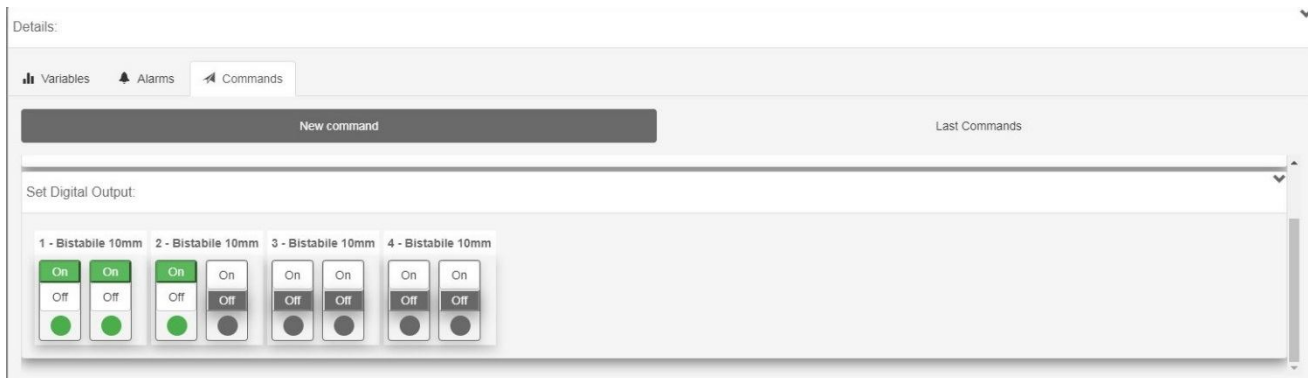
The information relating to the state of health of the valve and the number of operations performed by the single solenoid pilot is recorded by the sub-base on which the valve is mounted, should the replacement of a solenoid valve become malfunctioning or for which the system has highlighted a low state of health (preventive maintenance) it is necessary to reset this information.

In this way the system will resume recording only the information relating to the new valve fitted.

7.4.3 Set Digital Output: allows remote operation of the single coil of the valve island.

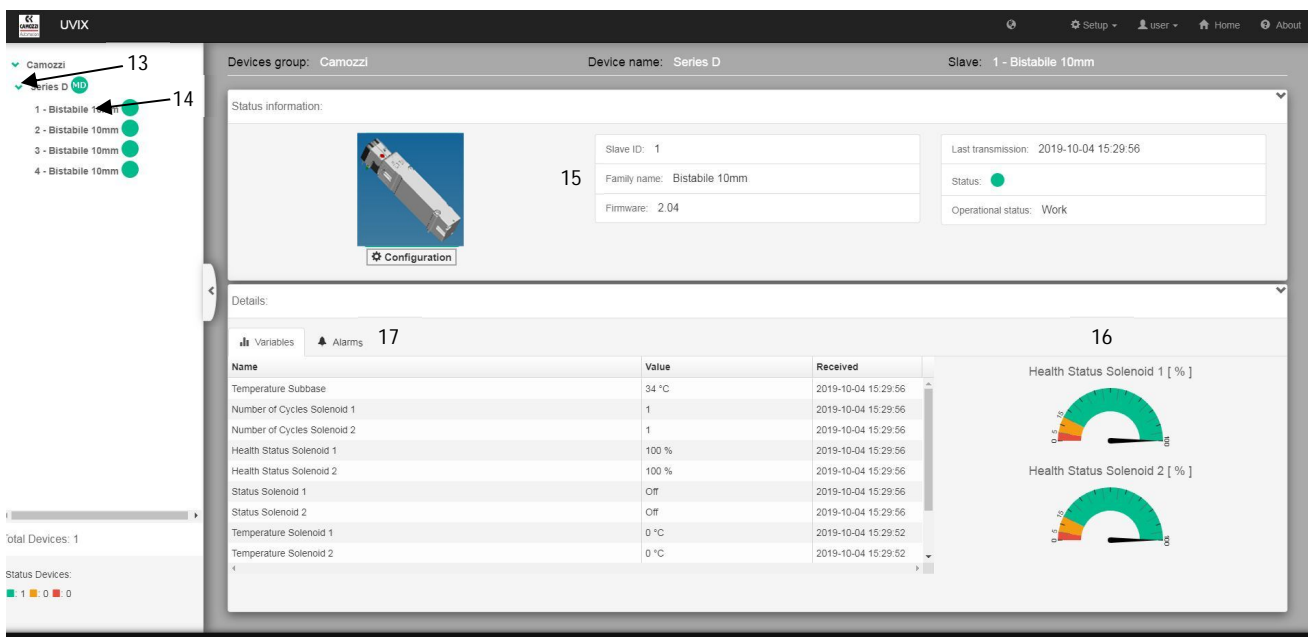
Warning: make sure that the solenoid valves are activated in total safety

In this mode the controls and commands of the PLC or control system are deactivated



Click on the "On" and "Off" keys to pilot the single solenoid pilot and to switch the solenoid coils.

7.5 General information and status of the individual solenoid coils

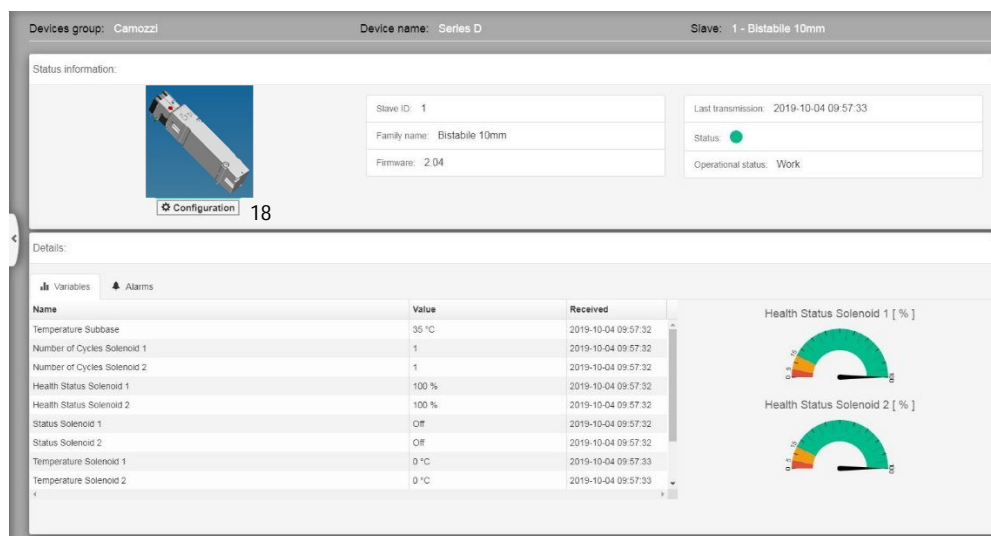


Click on the drop-down menu (13) to open the list of valves mounted on the Series D island and click on the valves (14) to display the content screen: general information (15), the health status of the individual solenoid pilot (16), the Tabs for displaying (17):

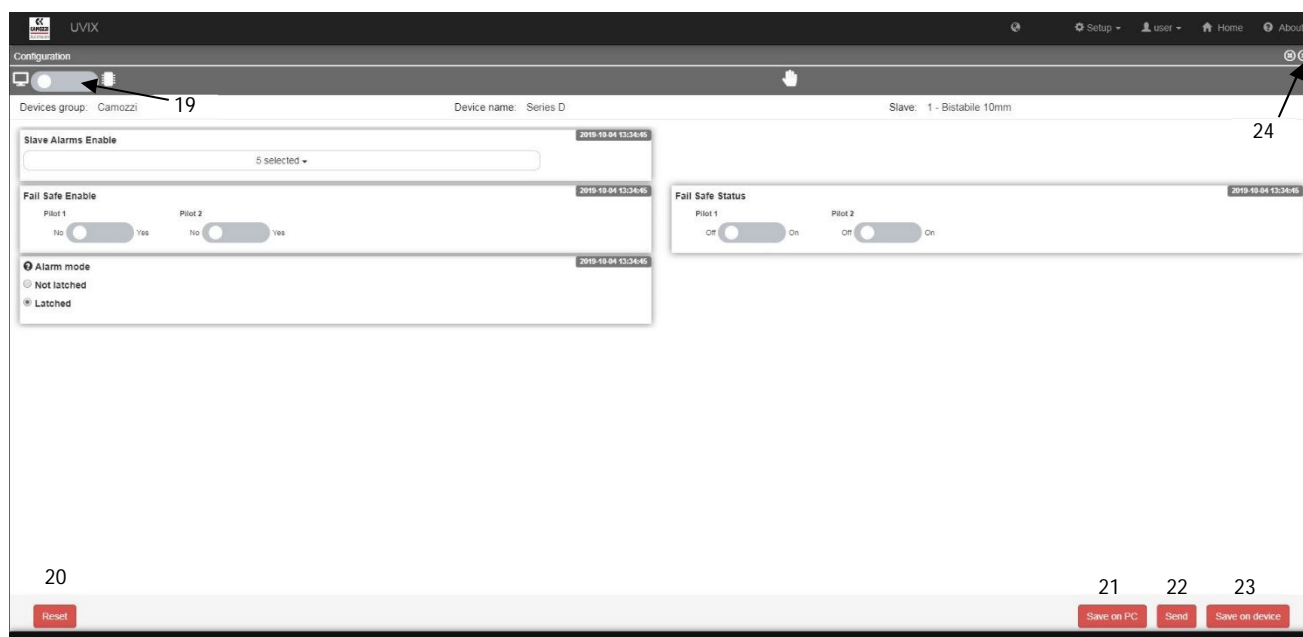
- **Variables:** the variables (for example the number of operations) recorded for the valve mounted on the sub-base are displayed
- **Alarms:** the status of the alarms monitored for the single sub-base / valve is displayed (see chapter "8. Fault identification"> "Sub-base LED behavior" table)

7.6 Configurazione dei parametri della sottobase (solo con accesso “user”)

La configurazione dei parametri è possibile solo con l’isola di valvola in modalità manuale.



Cliccare sul tasto “Configuration” (18) (presente solo con accesso “user”) per entrare nella schermata di configurazione della singola sottobase/valvola.



From the configuration screen you can:

- Display PC parameters or parameters saved in the sub-base (19)
- Reset the status of the configured parameters (20)
- Save the parameter configuration in CamozziUVIX (21)
- Send the parameters to the sub-base (22): the parameters become operational but are not saved and reset if the valve island is turned off
- Save the parameters in the sub-base (23): saving the parameters in the sub-base, the parameters will be stored and maintained in case of shutdown of the valve island.
- Close the screen (24)

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7.6.1 Set Alarms Enable: Enabling of the single alarm for each valve position



By clicking on the drop-down menu (25) it is possible to enable or disable the single alarm for the sub-base in configuration. If one of the events for which the alarm has been enabled occurs, an error message is sent.

The selectable alarms are:

- Non energized solenoid.
- Solenoid interrupted.
- Solenoid with anomalous current absorption or with excessive temperature.

Alarms are enabled by default.

6.5.1 Alarm mode:



For the single valve position it is possible to set the group of alarms as:

- Blocking (Default): the solenoid pilot in error is turned off and can no longer be piloted until the fault has been removed.
- Non-blocking: it is possible to set the single valve position so that the error generated by the solenoid pilot is signaled but the alarm is not blocking for the valve that will continue to operate.

NOTE: the system indicates with the icon (26) that the setting of the parameter in CamozziUVIX does not correspond to the state physically set in the sub-base

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8. FAULT IDENTIFICATION

The Series D valve island has an OPEN COLLECTOR diagnostic output with which it signals the faults that may occur to the single valve / sub-base. The maximum controllable current is 50mA and is equipped with short circuit protection.

(Pin 23 of the 25-pin D-sub connector and Pin 39 of the 44-pin D-sub connector)

- Non energized solenoid.
- Solenoid interrupted.
- Solenoid with anomalous current absorption or with excessive temperature.

The status of this output depends on the type of alarm set:

Blocker (Default): the status of the diagnostic output is restored by removing the fault by turning the island off and on again.

Non-blocking: the status of the diagnostic output is restored by removing the fault or by driving OFF the solenoid that caused the problem

The sub-bases indicate the type of alarm by means of a coded flashing of the LED associated with the individual solenoid pilot (see following table).

COMPORTAMENTO LED SOTTOBASI

| STATO | LED | COMPORTAMENTO | SIGNIFICATO |
|-------------------------------------|------------|---|---|
| Solenoid Not Energized | ● (Yellow) | Blinking (1 blink @100 ms every 1 s) | The solenoid is not energized. |
| Solenoid Interrupted | ● (Yellow) | Blinking (2 blink @100 ms every 1 s) | The solenoid is interrupted (open circuit). |
| Solenoid Overcurrent or Overheating | ● (Yellow) | Blinking (3 blink @100 ms every 1 s) | The solenoid is over the current threshold or it is over the heating threshold. |
| Subbase Overheating | ● (Yellow) | Blinking (10 Hz) | The subbase is over the heating threshold. |

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COMPORTAMENTO LED MASTER:

| STATO | LED | COMPORTAMENTO | SIGNIFICATO |
|------------------------------------|-----------|---|---|
| Work (WLAN OFF) | ● (red) | Off | The valves island is in work status and the WLAN module (optional) is connection is NOT present or NOT connected |
| | ● (green) | Blinking (1 blink @100 ms every 1s) | |
| Work (WLAN ON) | ● (red) | Off | The valves island is in work status and the WLAN module (optional) is present and connected |
| | ● (green) | Blinking (1 blink @300 ms every 3 s) | |
| Work "Manual mode" (WLAN ON) | ● (red) | Off | The valves island is in work status and the WLAN module (optional) is connection is NOT present or NOT connected. The <u>valve island is in "manual mode" setted by UVIX</u> |
| | ● (green) | Blinking (2 blink @300 ms every 3s) | |
| Valve alarm | ● (red) | Blinking (1 blink @100 ms every 1 s) | At least a valve has an alarm: <ul style="list-style-type: none"> - Subbase Overheating - Solenoid Overcurrent - Solenoid Overheating - Solenoid Not Energized - Solenoid Interrupted |
| | ● (green) | Blinking | |
| Comunication Alarm | ● (red) | Blinking (2 blink @100 ms every 1 s) | The left terminal (Master) has lost communication with the sub-bases |
| | ● (green) | | |
| Under Voltage alarm | ● (red) | Blinking (3 blink @100 ms every 1 s) | The power supply is under the voltage threshold. |
| | ● (green) | Blinking | |
| Overheating Master | ● (red) | Blinking (5 blink @100 ms every 1 s) | Overheating of the left terminal (Master) |
| | ● (green) | Blinking | |

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|-----------------|-----------|---|--|
| Numbering Alarm | ● (red) | Blinking (1 blink @100 ms every 1s) | The island is in error of numbering, it has never been put in communication with any sub-base Carry out the numbering procedure as per point 6.6 |
| | ● (green) | Off | |
| Mapping Alarm | ● (red) | Blinking (2 blink @100 ms every 1 s) | The island is in a mapping error. The layout of the sub-bases has been changed, check it and if necessary repeat the numbering procedure as per point 6.6 |
| | ● (green) | Off | |

9. USE


- Make sure that the voltage of the distribution network and that all operating conditions are within the admissible values.
- The product can be put into operation only in compliance with the specifications indicated, if these specifications are not respected the product can be put into operation only after authorization by Camozzi.
- Respect the indications on the identification plate.
- In case of prolonged stops longer than 3 months, before operating the system, carry out some empty maneuvers

10. USE LIMITATION

- Do not exceed the technical specifications shown in the "General characteristics" paragraph and in the Camozzi general catalog.
- Do not install the product in environments where the air itself can cause dangers.
- Unless specifically intended for use, do not use the product in environments where direct contact with corrosive gases, chemicals, salt water, water or steam could occur.

11. MAINTENANCE

- Incorrectly performed maintenance operations can compromise the correct functioning of the product and cause damage to surrounding people.
- Check the conditions to prevent the sudden release of pieces, then suspend the supply of power and allow the discharge of residual voltages before intervening.
- Check the possibility of having the product serviced at a technical assistance center.
- Never disassemble a live unit.
- Isolate the product electrically and pneumatically before maintenance.
- Always remove accessories before maintenance.

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- Always make sure that you are wearing the correct safety equipment required by local authorities and by current laws.
- In case of maintenance, replacement of wear parts, use only original Camozzi kits and have the operation carried out only by authorized specialist personnel. Otherwise the product homologation loses all its validity.

12. ECOLOGICAL INFORMATION

- At the end of the product life cycle, the separation of materials is recommended to allow for their recovery.
- Comply with the regulations in force in your country regarding disposal.
- The product and the parts that compose it comply with ROHS, REACH regulations.

13. Contacts

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Product information

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