VICTRIX PRO V2

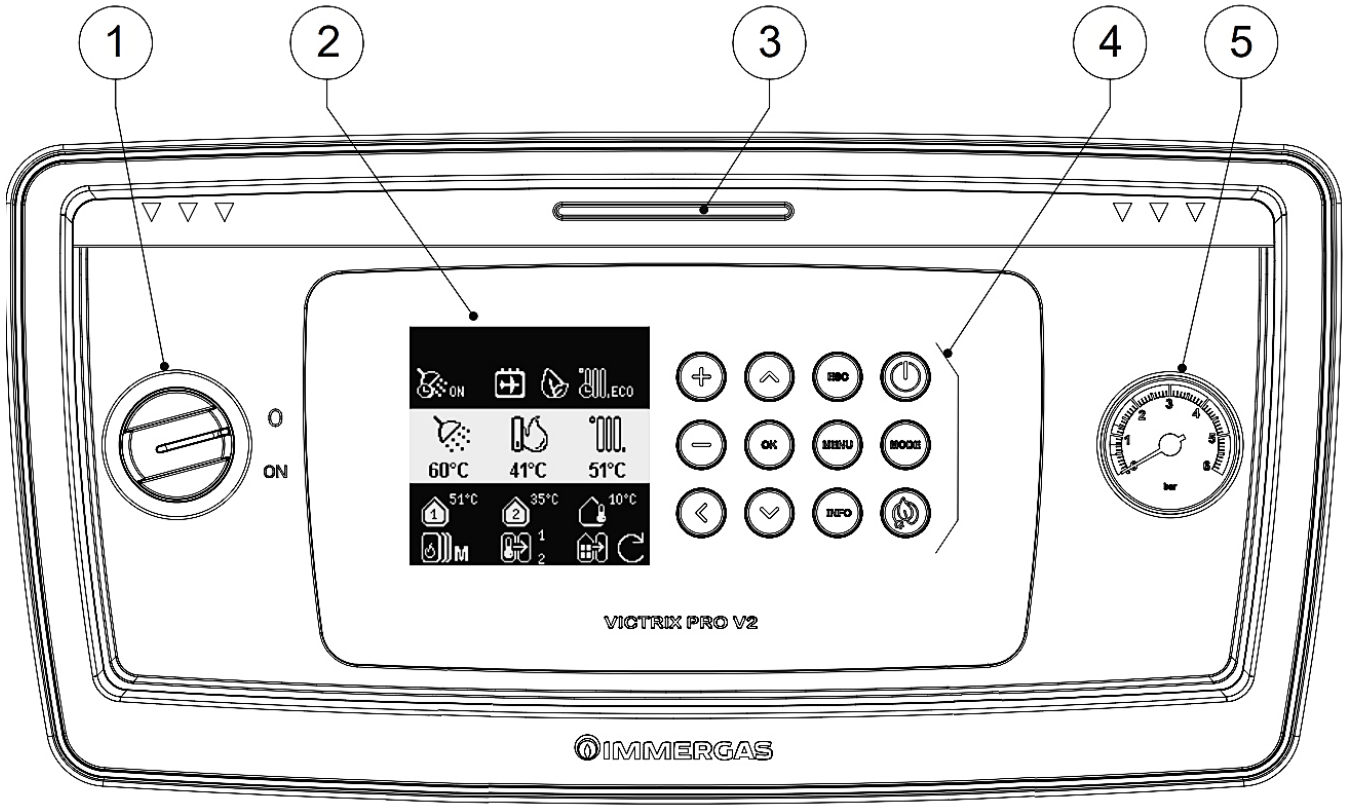
PCB SETTING

VICTRIX PRO V2 - Control Panel

The sliding cover allows for IPX5D rating and protects the display and buttons from accidental damage.

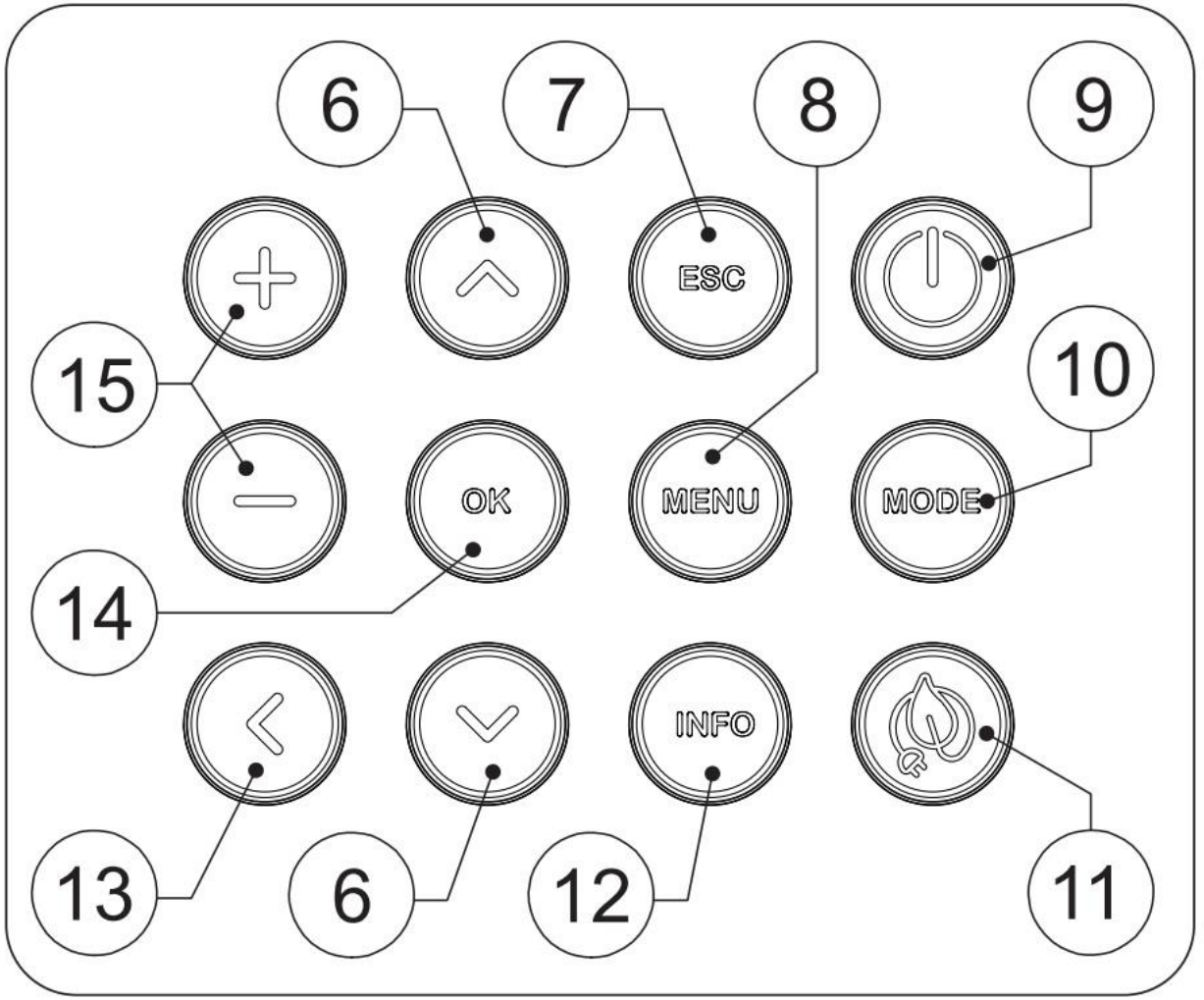
By reading the display and navigating with the buttons, adjustments and settings can be made on the circuit board.

1) Main switch
2) Display multi-function
3) Sliding cover
4) Function Keys
5) Pressure gauge



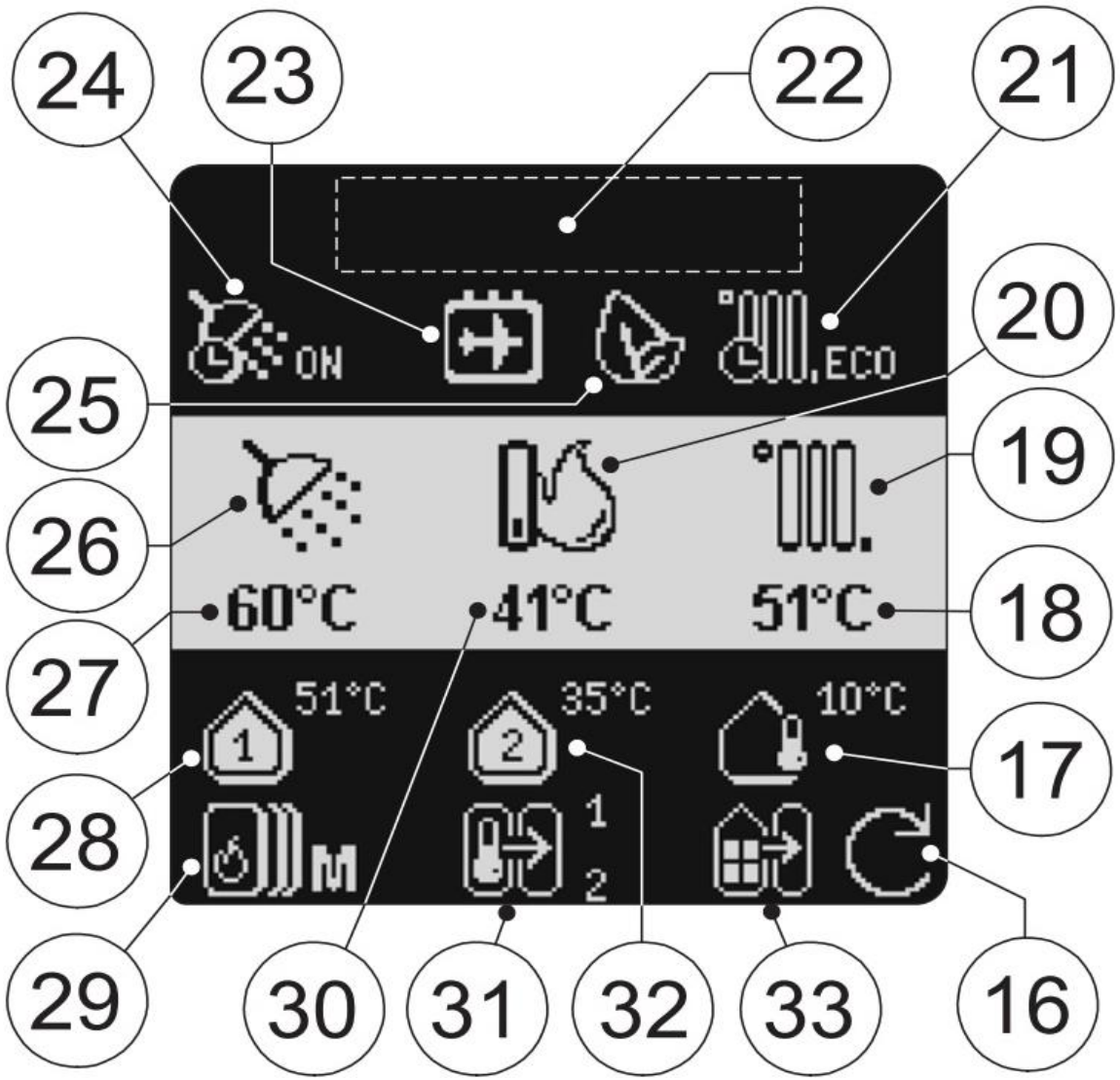
VICTRIX PRO V2 - Keypad

6) UP & DOWN to scroll menu button
7) Back to main screen button
8) Used to allow access to the User or Technician menu
9) Used to put the boiler in STBY mode; press approx. 3 sec.
10) Select Only CH – Only DHW or CH-DHW Mode
11) Eco mode Used to manually enable the Eco function
12) Info: *Used to display diagnostic elements directly*
13) Function button 1 step back
14) OK button
15) Increases and decreases the selected value

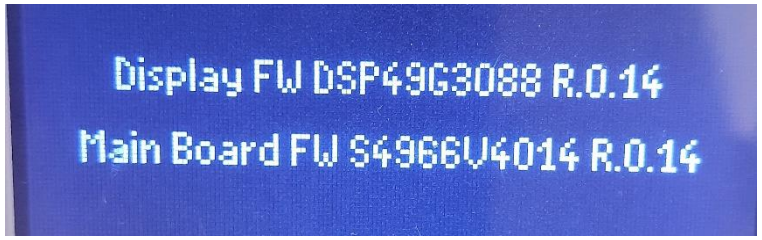


VICTRIX PRO V2 - Display

16 - Active when updating parameters (after changed a parameter)
17 - External probe connected
18 - CH setpoint temperature
19 - CH mode enabled
20 - Hourly heating programming active - Active mode (ON, OFF, ECO) of CH schedule
21 - Active when the heating program is active: ON-OFF-ECO
22 - Date and time or alarm with error
23 - Holiday mode
24 - Hourly programming of active DHW - Active mode (ON, OFF, ECO) of DHW schedule
25 - ECO mode is manually activated
26 - DHW mode enabled
27 - Indicates the DHW setpoint with probe
28 - Icon and setpoint Zone 1
29 - Indicates the presence of the simple cascade - Indicates the role of the boiler in the simple cascade
30 - Boiler flow temperature
31 - Indicates the presence of an OT device - Indicates the zone for the OT device
32 - Icon and setpoint Zone 2
33 - Indicates the presence of an external device connected via BUS



VICTRIX PRO V2 - PCB INFO

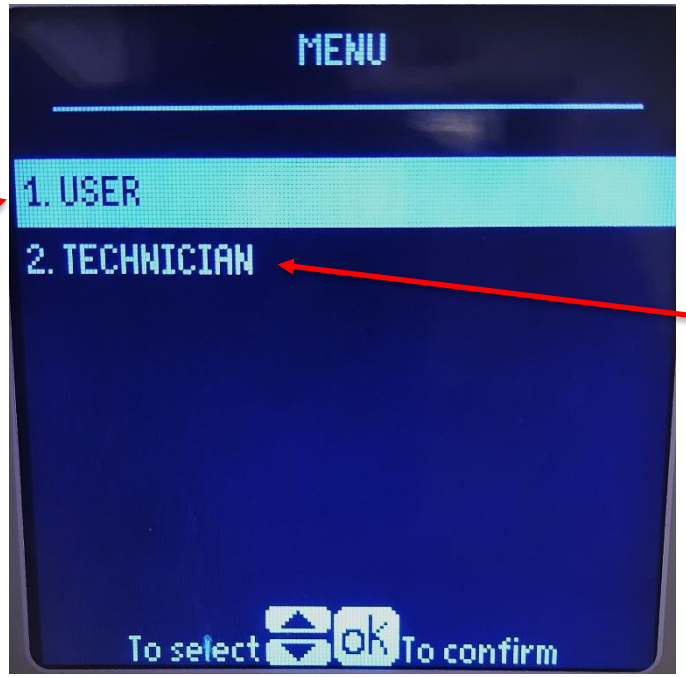


When the Display is switched on, it appear :
- Display Panel firmware version;
- Main Board firmware version.

By pressing the ***MENU*** button and using the *Up* and *Down* buttons to move through the menu, you can choose between the **User** menu and the **Technical** menu.

- **USER menu**

1) Central Heating
2) DHW
3) Holiday
4) Settings
5) Diagnostic
6) Maintenance

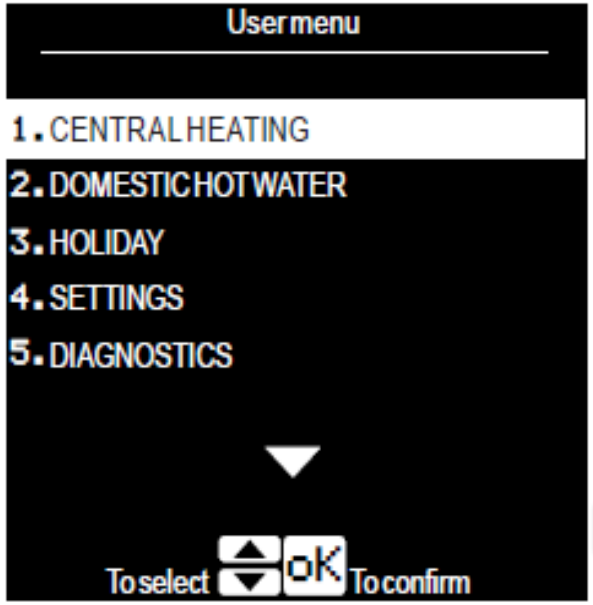


- **TECHNICAL menu**

1. HYDRAULIC SETTINGS
2. CH SETTINGS
3. DHW
4. SYSTEM SETTING
5. DIAGNOSTICS
6. MANUAL TEST
7. DEAERATION
8. CASCADE
9. RESTORE SETTINGS

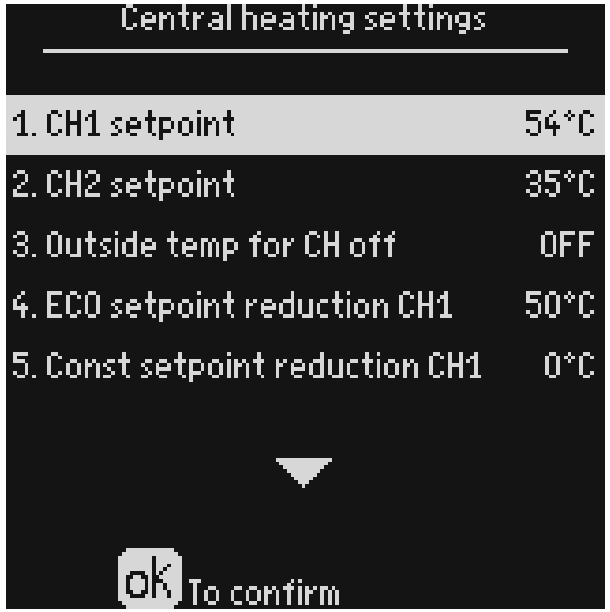
VICTRIX PRO V2 - PCB INFO

As follow is a description of how to move in the control panel:

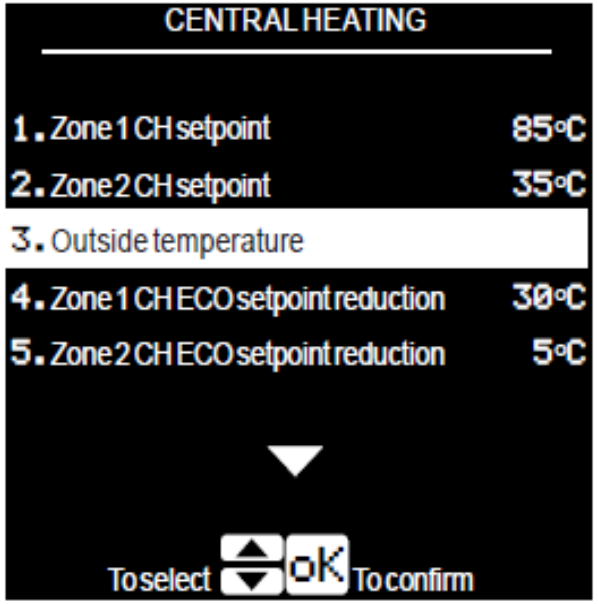


- Enter the menus;
- Moving in the menus;
- Set a menu item;
- Confirming a change;
- Exit without saving press the 'ESC' key.

When you reach the menu item you want to set, press 'OK', the value on the right next to the description will be highlighted.
Press the '**+**' or '**-**' button to adjust the value.



When you have adjusted the value, press **'OK' to confirm the change**.



VICTRIX PRO V2 - PCB SETTING

In addition to having useful parameters that make it flexible and malleable to the system to which it is connected, the V-PRO V2 also has a list of parameters to be used when installed in “EASY CASCADE” mode.

USER MENU’

TECHNICAL MENU’

BOILER INSTALLED IN A SINGLE WAY

USER MENU’ EASY CASCADE (only available on SLAVE boiler)

TECHNICAL MENU’ EASY CASCADE (only available on MASTER boiler)

BOILER INSTALLED IN EASY CASCADE WAY

After entering the 'USER’ menu, you access a list of variables that allow you to customise the use of the system.

USER MENU	
1	CENTRAL HEATING
2	DOMESTIC HOT WATER
3	HOLIDAY
4	SETTINGS
5	DIAGNOSTICS
6	MAINTENANCE

VICTRIX PRO V2 - PCB FUNCTIONS

ANTIFREEZE PROTECTION

The appliance has an antifreeze function that switches the burner on automatically when the temperature drops below 9°C (standard protection to minimum temperature of-5°C).
In order to guarantee the integrity of the appliance and the DHW heating system in are as where the temperature drops below zero, we recommend protecting the central heating system using anti-freeze liquid and installing the Immergas antifreeze Kit in the appliance.
If there is a storage tank in the system and a DHW probe, the burner is switched on when the temperature measured by the probe falls below 6°C and is switched off above 15°C.
For the antifreeze function to work properly, the storage tank must be filled with water; otherwise, the antifreeze can operate continuously.

Minimum room temperature -5°C

The appliance comes as per standard with an antifreeze function that activates the pump and the burner when the system water temperature in the appliance falls below 9°C. In these conditions, previously listed, the appliance is protected against freezing up to an ambient temperature of -5°C. Under this value the appliance may freeze.
When installing the appliance in locations where the temperature drops below 0°C, insulation of the heating connection pipes, condensate drain pipe and air vent valve of the condensing module is required.

Minimum room temperature -15°C

Protect the condensate drain siphon against freezing by using an accessory (antifreeze kit) comprising an electric resistance, the relevant wiring and a control thermostat.
In the previously listed conditions ad with the addition of the antifreeze kit, the appliance is protected against freezing up to a temperature of -15°C.

VICTRIX PRO V2 - PCB FUNCTIONS

OTHER ANTIFREEZE FUNCTIONS (OPTIONALS)

External probe (Optional)
If the external probe is present, the appliance's pump or other pumps if installed (Booster pump, Zone 1 pump, Zone 2 pump, System pump), is activated when the external temperature measured by the probe drops below the temperature set in the parameter "System settings/Additional antifreeze protections/Outside temperature pump activation" (Default -10°C).
In the case of a simple cascade, only the following pumps are activated: Zone 1 pump, Zone 2 pump, System pump.

System sensor (Optional)
If the system sensor is present, the antifreeze function is activated if the temperature measured by the sensor falls below the value of the parameter "System settings/Additional antifreeze protections/Antifreeze activation temperature" (Default 5°C).

Mixed probe (Optional)
If the mixed probe is present, the antifreeze function is activated if the temperature measured by the probe drops below 3°C.

DHW probe (optional)
If the DHW probe is present, the antifreeze function is activated if the temperature measured by the probe falls below 6°C and Stop it over 15°C.

VICTRIX PRO V2 - PCB SETTING - USER

USER MENU/ CENTRAL HEATING				
Item	**Menu**	**Description**	**Range**	**Default**
1	Zone 1 CH setpoint	Set the "Zone 1 CH setpoint" (user setpoint). Please note that this parameter can change the parameter "Zone 1 CH holiday setpoint".	Zone 1 Min CH setpoint Zone 1 Max CH setpoint	85 (°C)
2	Zone 2 CH setpoint	Set the "Zone 2 CH setpoint" (user setpoint). Please note that this parameter can change the parameter "Zone 2 CH holiday setpoint".	Zone 2 Min CH setpoint Zone 2 Max CH setpoint	35 (°C)
3	Outdoor temperature	---	---	---
4	Zone 1 CH ECO setpoint reduction	Sets the temperature that will be subtracted from the actual setpoint for heating zone 1 when the ”ECO” mode is activated. If the parameter ”CH Request type "Valve travel time" is set to "Only OTC", it defines the level for the reduction of the control setpoint for zone 1 heating, if the room thermostat is closed.	0 + 50 (°C)	30 (°C)
5	Zone2 CH ECO setpoint reduction	As above, but valid / used for zone 2	0+80 (°C)	5 (°C)

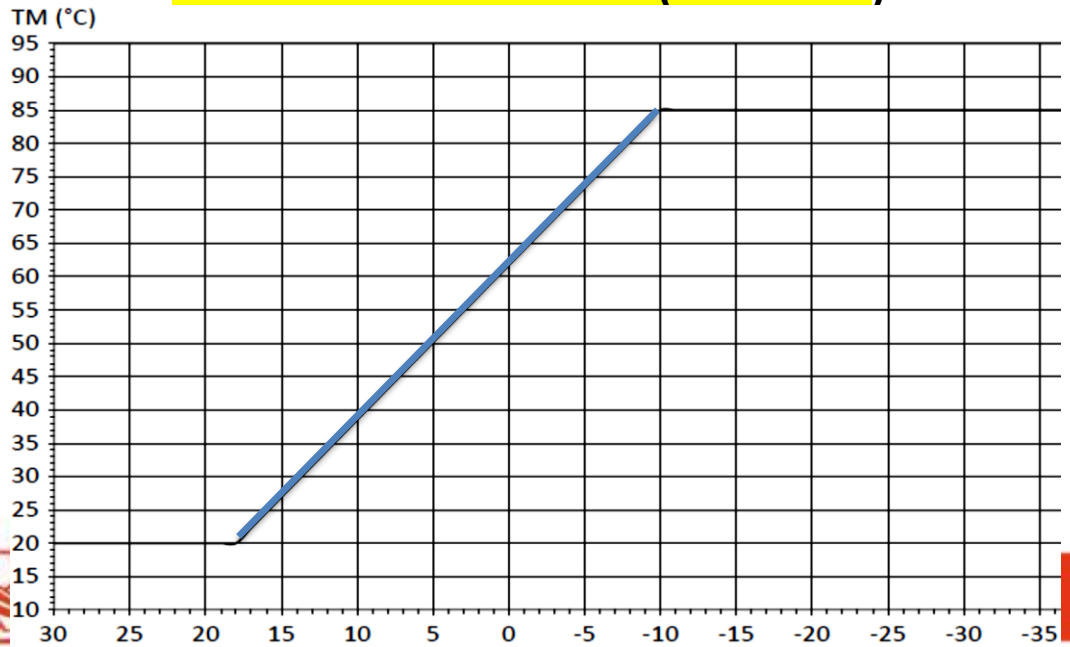
VICTRIX PRO V2 - PCB SETTING - USER

USER MENU / CENTRAL HEATING				
Item	**Menu**	**Description**	**Range**	**Default**
6	Zone 1 CH constant Set point reduction	Defines the level for reducing the control set-point for zone 1 heating when the room thermostat contact is open. It only applies if the CH demand type parameter is set as a constant setpoint.	0 + 50 (°C)	0 (°C)
7	Zone 2 CH constant Set point reduction	Defines the level for reducing the control set-point for zone 2 heating when the room thermostat contact is open. It only applies if the CH demand type parameter is set as a constant setpoint.	0 + 50 (°C)	0 (°C)
8	Enable/disable scheduler	Depending on the selection, it is possible to enable/disable the CH Demand from daily/ weekly programming.	Disabled Enabled	Disabled
9	Scheduler set	Allows you to set daily programming, or by periods (Monday-Friday) -(Monday-Sun- day) - (Saturday-Sunday) central heating activation time slots. A maximum of six time slots are allowed per day/period.		

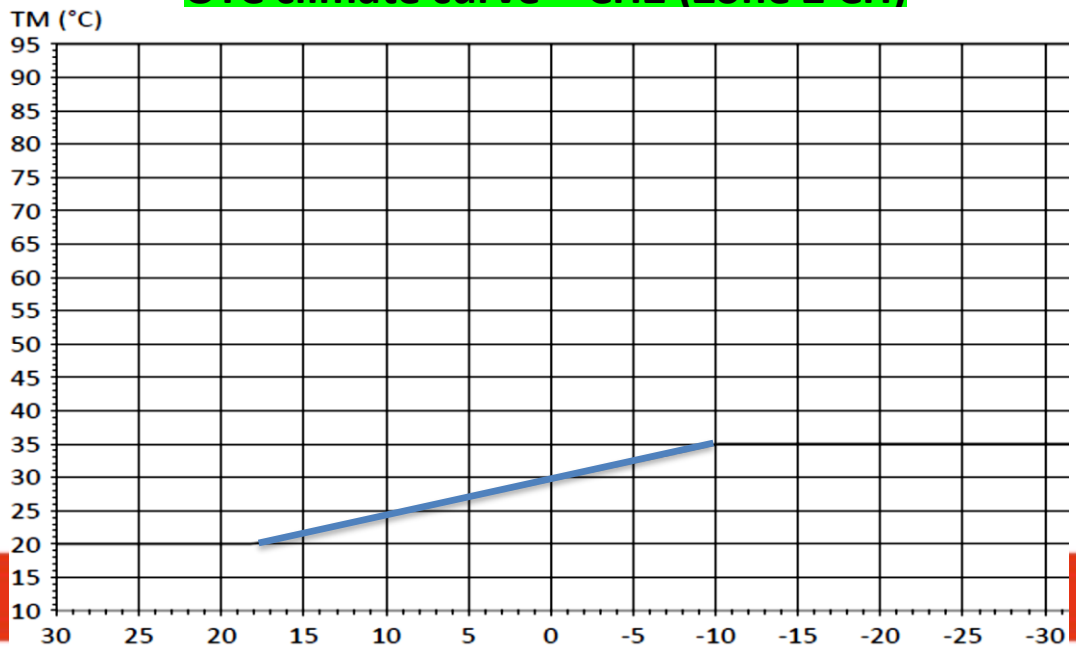
VICTRIX PRO V2 - PCB SETTING - USER

USER MENU/ CENTRAL HEATING / OUTDOOR TEMPERATURE				
Item	**Menu**	**Description**	**Range**	**Default**
1	Outside temperature for CH off	Defines the outside temperature at which OTC will disable central heating (even if the room thermostat demand is active).	7-25 (°C)	OFF
2	Zone 1 Offset	This is the offset value to be added on zone 1 to the setpoint calculated from the OTC curve.	-15 ÷ 15	0
3	Zone 2 Offset	This is the offset value to be added on zone 2to the setpoint calculated from the OTC curve.	-15 ÷ 15	0

OTC climate curve - CH1 (Zone 1 CH)



OTC climate curve – CH2 (Zone 2 CH)



VICTRIX PRO V2 - PCB SETTING - USER

USER MENU/ DOMESTIC HOT WATER				
item	**Menu**	**Description**	**Range**	**Default**
1	DHW setpoint	Sets the DHW setpoint (cannot be changed).When the NTC probe is connected	20+87 (°C)	65 (°C) 80°
2	ECO setpoint reduction Not visible when Thermostat is set in menu/HYDRAULIC SETTINGS/DHW request type	Sets the temperature that will be subtracted from "DHW setpoint" when the "ECO" mode is activated (only modifiable via access "Technician menu"). **	0+50 (°C)	20 (°C)
3	Enable/disable schedule	Depending on the selection, it is possible to enable/disable the DHW Demand from daily/week1yprogramming.	Disabled Enabled	Disabled
4	Scheduler set	Allows you to set daily programming, or by periods (Monday-Friday) (Monday-Sun- day) - (Saturday- Sunday) central heating activation time slots. A maximum of six time slots are allowed per day / period.		

** Visible only when NTC PROBE is set in menu HYDRAULIC SETTINGS/DHW request type

Not visible when Thermostat is set in menu HYDRAULIC SETTINGS/DHW request type

VICTRIX PRO V2 - PCB SETTING - USER

USER MENU/ HOLIDAY/ HOLIDAY MODE				
Item	**Menu**	**Description**	**Range**	**Default**
1	Zone 1CH holiday setpoint	Sets the zone 1 heating setpoint when "Holiday mode" is active. If the parameter "Zone 1 CH setpoint" is set to a lower value than this parameter, the latter will assume the same value as set on the parameter "Zone 1 CH setpoint". (this happens when storing).	Zone 1 Min CH set point Zone 1 CH set point (°C)	55 (°C)
2	Zone 2 CH holiday setpoint	Sets the zone 2 heating setpoint when "Holiday mode" is active. If the parameter ”Zone 2 CH setpoint” is set to a lower value than this parameter, the latter will assume the same value as set on the parameter "Zone 2 CH setpoint" . (this happens when storing).	Zone 2 Min CH set point Zone2 CH set point (°C)	20 (°C)
3	DHW holiday Setpoint	Sets the DHW setpoint when ”Holiday mode" is active. If the parameter "Storage temperature set point” is set to allow value than the parameter "DHW holiday setpoint", the latter will assume the same value as set on this parameter (this happens when storing).	20 + 87 (°C)	45 (°C)
4	Set holiday Period	When selected, a new screen will open to sequentially set the start and end date of ”Holiday mode". This function is an alternative to the parameter ”Manual holiday mode”.	Holiday start Holiday end	
5	Manual holiday Mode	Allows the manual activation of "Holiday mode", which remains active until manually deactivated. *When set to 'ON', this parameter has priority over the previous parameter ’Set holiday period’.* This function is an alternative to the parameter "Set holiday period".	ON OFF	OFF

VICTRIX PRO V2 - PCB SETTING - USER

IMMERGAS

USER MENU / SETTINGS / USER INTERFACE

Item	Menu	Description	Range	Default
1	Select language *	Allows the selection of the desired language. * If the menu is in English: Menu/User/Settings/Generals etting/ Select language	English, Italian, Bulgarian Czech, Greek, French, Flemish, Polish, Portuguese, Slovak, Spanish, Romanian, Russian Slovenian, German, Turkish, Ukrainian, Hungarian	English
2	Measurement units	Allows selection of the unit of measurement of the quantities.	Imperial Metric	Metric
3	Set date	Allows the date to be set.		
4	Set time	Allows setting the format and then the time.	24h clock format 12h clock format	24h clock format
5	Standby backlight	Standby backlight level. Add text warning: 'keep backlight level below 30% to reduce display degradation'.	30 + 100 (%)	30 (%)
6	Active backlight	Active back light level.	30 + 100 (%)	100 (%)
7	Display contrast	Defines the contrast of the LCD panel. ** The value varies for each display (pre-set by the board manufacturer). The typical average value is 310.	0 + 511	**

VICTRIX PRO V2 - PCB SETTING - USER

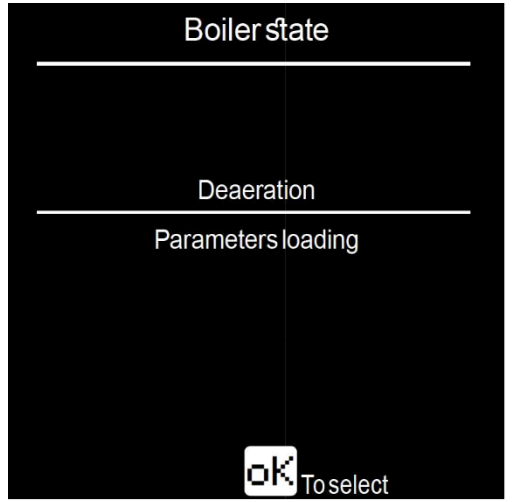
The Diagnostics menu can also be accessed directly via the 'INFO' button.

USER MENU / DIAGNOSTICS		
Item	**Menu**	**Description**
1	Boiler state	A new screen with the current operating status of the device will open.
2	System information	Shows a list of information about the installation.
3	Lock out history	It shows the last eight errors. Pressing the 'OK' button on the highlighted error will open a new screen containing details on the status of the device at the time the error occurred.
4	Boiler statistics	Shows a list of statistics
5	Firmware release	Shows which firmware version is currently installed on the boards.

VICTRIX PRO V2 - PCB SETTING - USER

USER MENU / DIAGNOSTICS / BOILER STATE	
Menu	**Description**
CH - Primary circuit setpoint reached	Displayed when the setpoint is reached and the burner is switched off during "CH Demand".
CH Demand	Displayed when "CH Demand" is active.
CH / DHW Demand	Displayed when parameter ”Parallel mode" is active and "CH Demand" and ”DHW Demand ”are active at the same time.
CH Post pump	Displayed at the end of “CH Demand“ and during the pump post-circulation phase.
DHW – Primary circuit setpoint reached	The burner is switched off due to the flow setpoint being exceeded (displayed for both "DHW Demand" and "CH Demand").
DHW Burner Delay	Displayed with "DHW Demand" the same demand is postponed (this status may not be visible as it is displayed for a few seconds).
DHW Demand	Displayed when "DHW Demand“ is active.
DHW Post pump	Displayed at the end of ”DHW Demand“ and during the pump post-circulation phase.
Antifreeze protection	Displayed when Antifreeze mode is active.
Slave operation	Displayed in simple cascade mode (only on slave boilers).
STAND-BY	STAND-BY
Test demand	Displayed on single appliance or Master if in simple cascade when "Chimney sweep“ is activated.
Parameters loading	Each time that the parameters are loaded from the P.C.B. to the display board.
Deaeration	Displayed when the deaeration function is active or waiting to be activated.
Manual relay test	Displayed when "Manual relay test” is active.

Two lines will appear in the display where the top line represents the current boiler status and the bottom line, the temporary status.



VICTRIX PRO V2 - PCB SETTING - USER

USER MENU / DIAGNOSTICS / SYSTEM INFORMATION		
Item	**Menu**	**Description**
1	Flame current*	Value in micro A.
2	Actual fan speed	Real-time fan speed (rpm).
3	Requested fan speed	Fan setpoint (rpm).
4	Modulation level *	Effective burner output value (%).
5	Boiler setpoint*	Temperature value calculated by the system (°C).
6	CH setpoint	Required temperature value during heating (°C).
7	Boiler DHW setpoint	Required temperature value in DHW phase (°C).
8	Boiler supply temperature	Temperature value measured by the system flow regulation probe (°C).
9	Return temperature*	Temperature value measured by the system return control probe (°C).
10	Flue temperature*	Temperature value measured by the flue probe (°C).
11	Flue temperature threshold	Error intervention threshold when the value detected by the flue probe is exceeded (High Flue Temp limit) (Error code 84).
12	Out door temperature*	Temperature value measured by the external probe (°C).
13	DHW storage temperature*	Temperature value measured by the DHW probe (°C).
14	System temperature *	Temperature value measured by the system-side flow sensor (°C).

VICTRIX PRO V2 - PCB SETTING - USER

USER MENU / DIAGNOSTICS / SYSTEM INFORMATION		
Item	**Menu**	**Description**
15	Mix zone temperature*	Temperature value measured by the low temperature flow probe (°C).
16	Mix zone setpoint	Required temperature value for the low-temperature zone (°C).
17	Water pressure*	Pressure value measured by the pressure transducer (bar).
19	Pump feedback	Pump status (%).
20	Number of burners	Number of appliances present (1 = single boiler; > 1 = number of appliances connected in simple cascade).
21	Cascade role	Role of the appliance in the simple cascade (Master if single appliance or if simple cascade Master boiler, Slave if simple cascade Slave appliance followed by the number assigned during cascade configuration).
22	Number of burners ON	Number of burners on.
23	Cascade modulation level	Effective power value of e simple cascade (%).
24	Input0-10V	Voltage value at the 0-10V input.

* These parameters have a submenu (chart) accessible by pressing the '**OK**' button.

The chart shows the last 24 hours measured at 12-minute intervals (119 readings). To view these readings, use the menu scroll buttons

VICTRIX PRO V2 - PCB SETTING - USER

USER MENU/ DIAGNOSTICS/ LOCK OUT (ERRORS) HISTORY

Shows the list of the last 8 errors. Pressing OK on the highlighted error will open a new screen containing details on the status of the device at the time the error was found (for details on errors paragraph).

USER MENU / DIAGNOSTICS / BOILER STATISTICS

Item	Menu	Description
1	CH ignitions *	Number of burner ignitions in ”CH mode".
2	CH runtime	Total hours of burner on in "CH mode".
3	DHW ignitions *	Number of burner ignitions in ”DHW mode".
4	DHW runtime	Total hours of burner on in ”DHW mode”.
5	Total hours power ON	Total hours of boiler power supply (not burner ignition hours).

When : '1’ is detected, this means that the ignitions have reached 20,
‘2’ its 40 ignitions;
‘3’ its 60 and so progressively every 20 ignitions.

VICTRIX PRO V2 - PCB SETTING - USER

USER MENU / DIAGNOSTICS / FIRMWARE RELEASE		
item	**Menu**	**Description**
1	Display	Views the display board firmware version.
2	Main board	Displays the P.C.B. firmware version.

USER MENU / MAINTENANCE		
item	**Menu**	**Description**
1	Service information	Displays the telephone number of the service centre.
2	Service due date	Date of next maintenance (see error code 102).

VICTRIX PRO V2 - PCB ERRORS

FAULT AND ANOMALY SIGNALS

The display show any malfunction by means of a numerical code and description. In this case its possible operate :
1: Reset the current error: by pressing the 'OK' button, if the error is resettable;
1a: If the ESC key is pressed, the main screen appears and the error it will moved at the top of the display in place of the date and time; pressing 'OK' in this case, the screen is displayed again (with the possibility of resetting the error);
2: If normal operating conditions are restored, the appliance restarts without having to be reset.

In the case of SIMPLE CASCADE, *the error display is present on the Master* appliance even if caused by the Slave appliance, while in the error history, each appliance records its own errors.

Error Code	Anomaly displayed	Cause	Appliance status / Solution
01	Failed Ignition	In the event of space heating or domestic hot water production demand, the appliance does not switch on within the pre-set time. Upon appliance commissioning or after ex- tended downtime, it may be necessary to eliminate the block.	Press the OK (Reset) button
02	False Flame	This occurs during the power-on phase in the event of a leak on the detection circuit or anomaly in the flame control unit.	Press the OK (Reset) button
03	Overtemperature	During normal operation, there is a cause of excessive overheating internally, the appliance goes into overheating block.	Press the OK (Reset) button

Error Code	Anomaly displayed	Cause	Appliance status / Solution
05	Fan Speed	This occurs if the fan speed is incorrect.	Press the OK (Reset) button
08	Flame circuit fault	During the ignition phase an anomaly was detected on the electronic flame control circuit and the appliance switches	Press the OK (Reset) button
09	Gas valve circuit fault	The board detects an anomaly in the gas valve circuit. Before replacing the board, verify the absence of short circuits on gas valve and related connector.	Press the OK (Reset) button
13	Reset limit reached	Number of allowed resets already performed.	Attention: it is possible to reset the anomaly up to 5 consecutive times within 15 minutes. By switching the appliance on and off the 5 attempts are re-acquired.
19	Loss of flame	It occurs when the appliance is correctly ignited but an un- expected extinguishing of the burner flame occurs 8 times in 15 minutes.	Press the OK (Reset)
21	Mainboard fault	An error is detected on the main circuit board and the device does not start.	Probable damage of the main circuit board hardware. Press the OK (Reset)
25	Main board fault	An error is detected on the main circuit board and the device does not start.	Disconnect and reconnect the power supply to the device. (2)

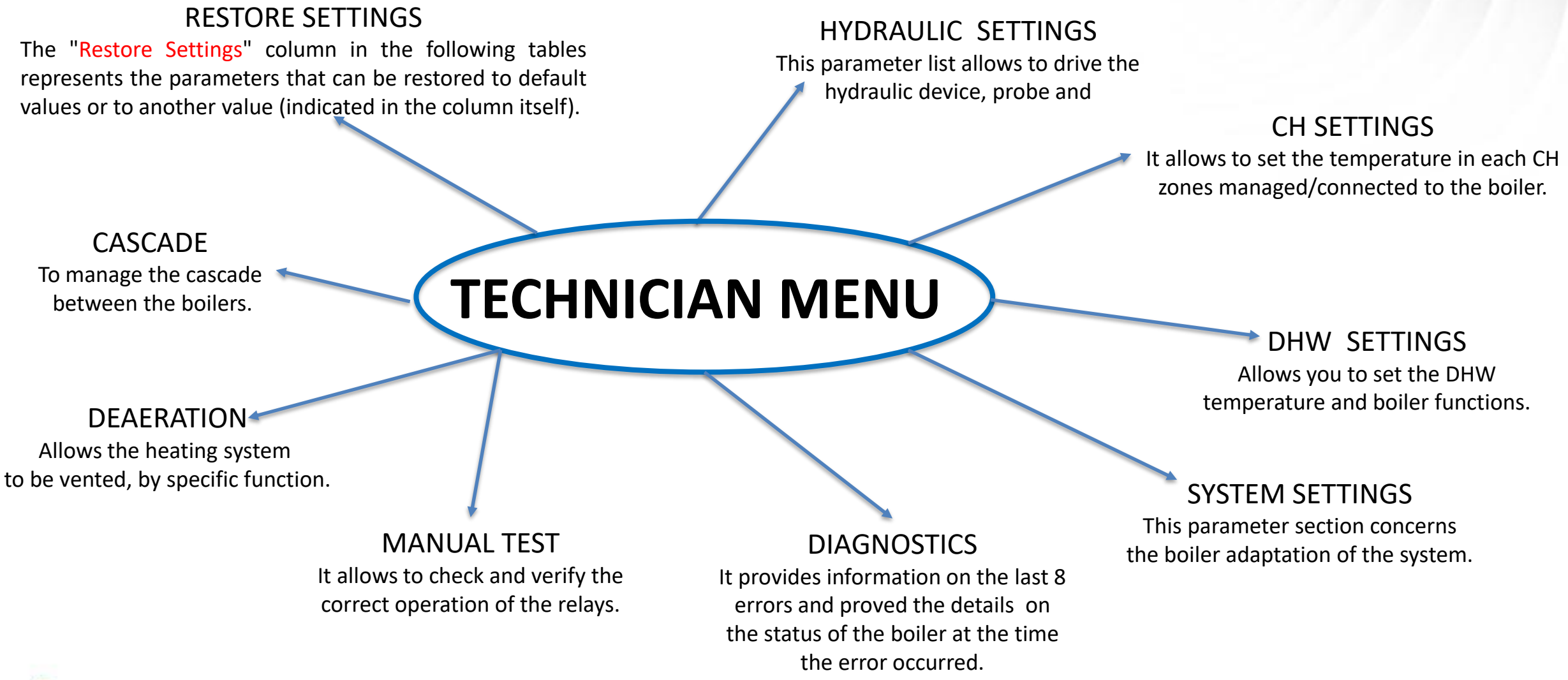
Error Code	Anomaly displayed	Cause	Appliancestatus / Solution
30 - 31	**Supply** sensor shorted	The board detects a short circuit or open on the system flow regulation NTC probe.	(2) (1)
32 - 33	**DHW** sensor shorted	The board detects a short circuit or open DHW NTC probe.	(2) (1)
34	Low voltage	This occurs when the power supply voltage is lower than the allowed limits for correct operation of the appliance.	(2) (1)
37	Low water pressure	Sufficient water pressure inside the central heating circuit to guarantee the correct operation of the appliance is not detected.	Check the pressure gauge in the boiler. Ensure the system pressure is at least 1 bar and restore the correct pressure, if necessary. (2) (1)
43 - 44	**Return** sensor shorted	The board detects a short circuit or open on the return NTC probe.	(2) (1)
45 - 46	**Flue** sensor shorted	The board detects a short circuit or open on the flue NTC probe.	(2) (1)
47	Water pressure transducer fault	Possible pressure transducer or wiring fault.	(2) (1)
77	**Mix zone** overtemperature	The temperature read by the low temperature flow probe has exceeded the set limit.	(2) (1)
78 - 79	**Mix zone** sensor short	The board detects a short-circuit or open on the NTC probe of the mixed zone.	(2) (1)
80	**Supply and return** sensor connection fault.	If the electrical connection between the two NTC probes is switched around, the board will detect the anomaly (it may be necessary to wait 3 minutes for the error to be detected).	Press the OK (Reset) button (1)

Error Code	Anomaly displayed	Cause	Appliance status /Solution
82	DeltaT protection	The boiler detects a sudden, un expected increase in the DT between the flow probe and the system return probe. It can also be caused by a single defective sensor.	The burner is switched off to prevent any damage to the condensing module, once the correct AT has been restored and the time of l minute has elapsed since the appearance of the fault, the appliance returns to normal operation. Check that here is water circulation in the appliance, that the circulator is configured according to the system's requirements, and that the flow and return probes work correctly. (2) (1)
84	High Flue Temp limit	If the appliance malfunctions, too high a temperature is detected in the flue gas circuit and the appliance switches	Press the OK (Reset) button (1)
85	Pump fault	Possible blocked impeller, automatic release routine (dura-tion30minutes),electrical fault.	Switch off for at least 30 seconds and switch back on. (2) (1)
86	Pump malfunction	Possible electrical fault, water flow already present, impeller slowed down.	Switch off for at least 30 seconds and switch back on. (2) (1)
89	Incorrect parameter setting	**Possible misconfiguration of some parameters in the simple cascade**: the parameter “System sensor" is not configured the parameter "System sensor" is not configured in "DHW mode", but "DHW pump“ has been configured via the "multifunction relays" the parameter "System sensor" is configured in "DHW mode", but "DHW pump" has not been configured via the "multifunction relays" the parameter "Boiler for DHW” was incorrectly set.	(2) (1)
90	OpenTherm 1/2 connection lost	The device signals a loss of communication with the OT remote control mounted on Zone 1 or Zone 2, or with both thermostats (heating of the system is not guaranteed).	Check the connections to the communication BUS. Press the OK (Reset) button (the fault disappears and the device operates in independent mode until communication is restored). (2) (1)

Error Code	Anomaly displayed	Cause	Appliancestatus / Solution
91 -92	System sensor shorted	The board detects a short-circuit or open on the system side flow NTC probe (no guarantee of efficient operation of the system).	(2) (1)
93	Outdoor sensor shorted	The board detects a short circuit on the external NTC probe (applicable if the parameter "CH Request type" in "HYDRAULIC SETTINGS" is set as "Room thermostat OTC“ or "Only OTC").	(2) (1)
94	Display board fault	Error in the firmware version of the 'Display Board'.	(2) (I)
96	Outdoor sensor open	The board detects an open contact on the external NTC probe (applicable if the parameter "CH Request type" in "HYDRAULIC SETTINGS" is set as "Room thermostat OTC" or ”Only OTC").	(2) (1)
97	Cascade mismatch	In the case of **simple cascade**, the P.C.B. of the Master appliance detects fewer boilers Slave in the chain than the last "Autodetect".	Check the connections to **the simple cascade communication BUS**, and repeat the "Autodetect" procedure in the "Cascade" menu. (2) (1)
98	Slave bus fault	In the case of **simple cascade**, the P.C.B. of the appliance Slave receives no communication from the boiler Master.	Check the connections to the **simple cascade communication** BUS (repeat the "Autodetect" procedure in the "Cascade" menu). This error will only appear on the display of the Slave devices (2) (1)

Error Code	Anomaly displayed	Cause	Appliancestatus /Solution
99	Master bus fault	In the case of **simple cascade**, the P.C.B. of the Master appliance receives no communication from one or more boilers Slave (simple cascade will operate with fewer appliances). In the case of **simple cascade**, the role of the Slave devices has not been assigned in the correct sequence (the sequence must respect the numerical sequence and start from 1).	Check the connections to the simple cascade communication BUS, and repeat the "Autodetect" procedure in the "Cascade" menu. This error will only appear on the display of the Master appliance (2) (1)
100	External controller connection lost	The device signals a loss of communication with the cascade and zone regulator or the BMS system (central and DHW heating is not guaranteed).	Check the connections to the communication BUS. Press the Reset button (the fault disappears and the device operates in stand alone mode until communication is restored). (2) (1)
101	Hydraulic configuration is incorrect	Possible mis configuration of some parameters: - the parameter "Boiler for DHW " was incorrectly set - the parameter "3-way valve CH" or the parameter "3-way valve DHW" was incorrectly set via the 'multifunction relays'	(2) (1)
102	Maintenance reminder	Indicates that it is necessary to perform maintenance operations. If this signal is reset, it is re proposed within 24 hours, until the date of the next maintenance is updated from the menu "TECHNICIAN".	Press the OK (Reset) button to temporarily clear the warning. Authorised After-Sales Technical Assistance Centre).

VICTRIX PRO V2 - PCB SETTING - Technical Menu



RESTORE SETTINGS
The "Restore Settings" column in the following tables represents the parameters that can be restored to default values or to another value (indicated in the column itself).

HYDRAULIC SETTINGS
This parameter list allows to drive the hydraulic device, probe and

CH SETTINGS
It allows to set the temperature in each CH zones managed/connected to the boiler.

CASCADE
To manage the cascade between the boilers.

DHW SETTINGS
Allows you to set the DHW temperature and boiler functions.

DEAERATION
Allows the heating system to be vented, by specific function.

SYSTEM SETTINGS
This parameter section concerns the boiler adaptation of the system.

MANUAL TEST
It allows to check and verify the correct operation of the relays.

DIAGNOSTICS
It provides information on the last 8 errors and proved the details on the status of the boiler at the time the error occurred.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU	
1	HYDRAULIC SETTINGS
2	CH - Central Heating SETTINGS
3	DHW - Domestic hot water SETTINGS
4	SYSTEM SETTINGS
5	DIAGNOSTICS
6	MANUAL TEST
7	DEAERATION
8	CASCADE
9	RESTORE SETTINGS **

To access the technical menu, its necessary to enter the **password '123'** using the '**+**' and '**-**' buttons, pressing 'OK' with each entered digit.

** **Caution:** Read and understand the device instructions before performing the reset operation.

N.B.: see the "Restore settings" column of "Technician menu" for each parameter that **can be reset to factory settings** or a set value.

The "Restore Settings" column in the following tables represents the parameters that can be restored to default values or to another value (indicated in the column itself).

Press the 'OK' button (for about 3 sec.) to reset the settings, any other button to retain the current settings.

N.B. : the newly parameters are to be configured according to plant requirements.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / HYDRAULIC SETTINGS	
1	Relays settings
2	System sensor
3	Mix zone
4	CH Request type
5	DHW request type
6	Parallel mode
7	3-way valve

This parameter list allows to drive :

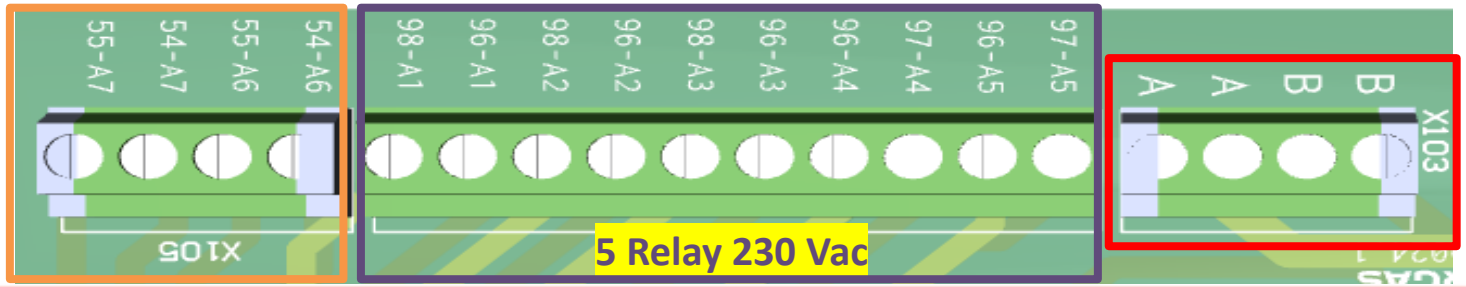
- ✓ Hydraulic devices via relays.
- ✓ Set the sensor installed in the hydraulic system
- ✓ Set the number and type of operating CH circuits
- ✓ Set the type of request for the CH and DHW circuits
- ✓ Set the priority or the parallel way in the boiler
- ✓ Choose the type of 3 way valve or DHW pump

VICTRIX PRO V2 - PCB SETTING - Technical Menu

IMMERGAS

TECHNICIAN MENU / HYDRAULIC SETTINGS / RELAY SETTINGS					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1 2 3 4 5	K70-A1 K70-A2 K70-A3 K70-A4 K70-A5	Each relay has a dedicated parameter that determines its operation within a hydraulic configuration to which the boiler is connected. N.B.: The first five relays are located on the main P.C.B. and provide the 230 voltage for the pump and mixing valve and other possibly connected devices.	Relay not used Booster pump (the same operation as Q e P clamps in old version) Zone 1 pump Zone 2 pump System pump, also used when the hydraulic separator is installed ** (To setting this parameter SEE NEXT SLIDE referred to parameter 8) DHW pump System fault (When the error appear on the display, the related relay close the contact.) 3-way valve CH 3-way valve DHW Burner on Mixing valve: opens Mixing valve: closes	Relay not used	ALL YES

N°2 Relay with free-contact



Power supply that gives voltage to relays

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / HYDRAULIC SETTINGS / RELAY SETTINGS					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
6 7	K70 - A6 K70 - A7	A6 and A7 DRY / FREE CONTACT drived by the DISPLAY PCB	Relay not used Zone 1pump Zone 2 pump System pump DHW pump System fault Burner on Mixing valve: opens Mixing valve: closes	Relay not used	Yes Yes
8	System pump configuration**	Referring to 1,2,3,4,5, parameter above. *The parameter is particularly suitable* in the Zone 1 + Zone 2 configuration (as reported on I.B. example) *where there is only one circulator serving two zones with two separate thermostats*.	not used Zone 1 Zone 2 DHW Zone 1+ Zone 2 Zone 1+ DHW Zone 2 + DHW all used	not used	Yes

** Once the system pump parameter has been selected on the relay, the system pump configuration parameter must also be set, which determines the operation of "Zone 1 pump" and/or "Zone 2 pump" and/or "DHW".

VICTRIX PRO V2 - PCB SETTING - Technical Menu

The system sensor is connected to terminals S1 and S2 and must be configured via the parameter "System sensor".

If the system flow sensor fails, the system will still function but with reduced performance and corresponding error will also be shown on the display.

TECHNICIAN MENU / HYDRAULIC SETTINGS / SYSTEM SENSOR				
Menu	**Description**	**Range**	**Default**	**Restore settings**
CH mode	The plant (system) sensor configuration determines how the sensor is used.	CH mode	Not used	Yes
DHW mode *		DHW mode		
CH + DHW mode		CH + DHW mode		

* Use for single appliance only. **In the case of simple cascade, the parameter “CH + DHW mode" must necessarily be selected, otherwise error 89 is displayed**.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

IMMERGAS

TECHNICIAN MENU / HYDRAULIC SETTINGS / MIX ZONE

Item	Menu	Description	Range	Default	Restore settings
1	Mix zone selection*	Selects the mixed heating zone (mixing valve, sensor). Only one heating zone can be equipped with a mixing valve.	1-2	2	Yes
2	Valve travel time	Running time of the mixing valve. Enter the correct value for the mixing valve used.	1 – 240 s	150 s	Yes
3	High temperature protection	Limitation of the maximum allowed control setpoint for the mixed zone (The parameter value - 3°C.) The parameter value increased by 3°C defines the over-temperature threshold of the mixed zone (see Error 77).	20 - 80 (°C)	45 (°C)	Yes
4	Hysteresis	If the temperature difference between the heating setpoint of the mixed zone and the temperature measured by the low temperature flow sensor is less than the hysteresis value, the mixing valve is not actuated. If the hysteresis is greater, the mixing valve is actuated according to the control algorithm.	10°C	1°C	Yes
5	Loop time	Control cycle time of the mixing valve control algorithm. Higher values make the response of the control algorithm slower (the mixing valve is actuated less frequently) vice versa the mixing valve is actuated more frequently.	1+60 (s)	15 (s)	Yes
6	K factor	Gain factor for the control of the mixing valve: the time during which the mixing valve is actuated is given by the value of the difference between the heating setpoint of the mixed zone and the temperature measured by the low temperature flow sensor, multiplied by "**K** factor".	1 - 30 sec	1	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / HYDRAULIC SETTINGS / CH REQUEST TYPE				
Menu	**Description**	**Range**	**Default**	**Restore settings**
Room thermostat + OTC	They allow the selection of different CH demands according to the type of installations.	Room thermostat + OTC	Room thermostat Setpoint	Yes
Room thermostat setpoint		Room thermostat setpoint		
Only OTC		Only OTC		
Constant Setpoint		Constant Setpoint		

Room thermostat + OTC: It is used in the case of an external probe with room thermostat ON/OFF or OT (see also climate curve). If the room thermostat ON/OFF is used, the CH schedule and holiday mode can be used.

Room thermostat setpoint (default): It is used with room thermostat ON/OFF or Opentherm.
The external sensor can be connected, but without being used by the appliance, for CH setpoint control but is used in the following cases: OT; Cascade and zone regulator and BMS.
In the heating deactivation function during the summer period (see parameter "OTC for CH off"). When using the room thermostat ON/OFF, the scheduler set heating and Holiday mode can be used.

Only OTC: It is used when an Outdoor sensor is present but the CH demand is permanently generated on both heating zones (it is not mandatory to configure both pumps of the two zones) (see also climate curve). Inputs OT1 - OT2 and OT3 - OT4 can be used as setpoint reduction (contact closed).

Constant Setpoint: The CH demand is generated permanently on both heating zones (it is not mandatory to configure the pumps of the 2 zones). Inputs OT1 and OT2 (in this case), can be used as setpoint reduction (open contact). With closed contact, the setpoint used is given by the parameters "Zone 1 and 2 CH setpoint".
With open contact, a setpoint reduction is implemented (see parameters "Zone 1 and 2 CH constant setpoint reduction".
Hourly programming has no influence (although the icon appears on the main screen).

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / HYDRAULIC SETTINGS / CH REQUEST TYPE				
Menu	**Description**	**Range**	**Default**	**Restore settings**
0-10 V Power control	They allow the selection of different CH demands according to the type of installations.	0-10 V Power control	Room thermostat Setpoint	Yes
0-10 V Temperature control		0-10 V Temperature control.		

By setting this parameter, both in temperature and in Power, *the CH demand is subject to priority in DHW, consequently there is deactivation CH request*.

- ✓ As the voltage at the input increases, a CH Demand is activated in the range between 2V (min) and 10V (max), the temperature or power setpoint will be proportional to the voltage.
- ✓ As the voltage decreases from 2V to 1V, CH Demand is the minimum, while below 1V the demand is deactivated.

0-10 V power control: The CH demand is controlled in power. Inputs OT1-OT2 and OT3-OT4 **must not be closed**.
With the default values of the parameter "Power set" (central heating), at 2 V, the power of the device will be set to the parameter "Minimum power", at 10 V, it will be set to the parameter "Maximum power" and at intermediate points, a proportional value between this parameters. In the event that one or both parameters of the power setting are different from the default value, the proportionality of the straight line will be identical to the case described above, (the voltage range remains between 2 V and 10 V). During power operation, the temperature set is the one set in parameter "Zone 1 CH setpoint".

Temperature control 0-10V: The CH demand is controlled via the setpoint. Inputs OT1-OT2 and OT3-OT4 must not be closed.
The temperature setpoint (CH) is related to the voltage in this way:

- at 2 V, the setpoint will be set to the parameter "Zone 1 minimum CH setpoint“;
- at 10 V, it will be set to the parameter "Zone 1 CH setpoint“ and at intermediate points, a proportional value between the two parameters.

In case the 0-10 V input is floating, the voltage at the input can reach 2.5 V, which means a request. To avoid this, connect a resistor in parallel to the input. This resistor must be between 2.2 kOhm and 50 kOhm (4.7 kOhm is recommended).

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / HYDRAULIC SETTINGS / DHW REQUEST TYPE				
Menu	**Description**	**Range**	**Default**	**Restore settings**
Thermostat	Allows you to select the demand type for DHW.	Thermostat	Thermostat	Yes
Sensor		Sensor		

TECHNICIAN MENU / HYDRAULIC SETTINGS / PARALLEL MODE				
Menu	**Description**	**Range**	**Default**	**Restore settings**
Disabled	Parallel mode allows simultaneous satisfaction of "CH Demand" and "DHW Demand". This mode requires a suitable hydraulic configuration.	Disabled	Disabled	Yes
Enabled		Enabled		

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ HYDRAULIC SETTINGS / 3-WAY VALVE					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	3-way valve selection	3-way valve selection: Motorized (Motorised diverter valve) Spring return (Diverter valve with spring return)	Motorized or Spring return	Motorized	Yes
2	Travel time	Defines the time during which the 'electric' valve is energised to switch the position from the DHW circuit to the CH circuit and vice versa.	1 to 255 (sec)	12 (sec)	Yes
3	Default position	Selects the position of the valve at rest: CH or DHW	CH or DHW	CH	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / CH SETTINGS	
1	Power set
2	Temperatures
3	Overtemperature
4	Outside temperature
5	Timing setting

This parameter section relates only to boiler settings during Central Heating operation.

TECHNICIAN MENU / CH SETTINGS / POWER SET					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Maximum power	Sets the percentage of the boiler's "Maximum power" in CH mode	Minimum Power - 100 (%)	100 (%)	Yes
2	Minimum power	Sets the percentage of the boiler's "Minimum power" in CH mode	Maximum power (%)	0 (%)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / CH SETTINGS / TEMPERATURES					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Zone 1 MAX CH setpoint	Set the "Zone 1max CH setpoint.	15 ÷ 90 (°C)	85 (°C)	Yes
2	Zone 1 MIN CH setpoint	Set the "Zone 1min CH setpoint".	15 ÷ Zone 1 max CH setpoint (°C)	20 (C)	Yes
3	Zone 1 CH setpoint	Set the "Zone 1 CH setpoint" (can also be set by the user). Please note that this parameter can change the parameter "Zone 1 CH holiday setpoint".	Zone 1 min CH setpoint ÷ Zone 1 max CH set point (°C)	85 (°C)	Yes
4	Zone 2 MAX CH setpoint	Set the "Zone 2 maximum CH setpoint".	15 ÷ 90 (°C)	40 (°C)	Yes
5	Zone 2 MIN CH setpoint	Set the "Zone 2 minimum CH setpoint".	Zone 1 max CH set point (°C)	20 (°C)	Yes
6	Zone 2 CH setpoint	Set the "Zone 2 CH setpoint" (can also be set by the user). Please note that this parameter can change the parameter "Zone 2 CH holiday setpoint".	Zone 1 min CH setpoint ÷ Zone 1 max CH setpoint (°C)	35 (°C)	Yes
7	CH setpoint hysteresis	Sets the hysteresis of the CH setpoint (single for both zones).	2 ÷ 10 (°C)	5 (°C)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / CH SETTINGS / TEMPERATURES					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
8	Zone 1CH ECO setpoint reduction	Sets the temperature that will be subtracted from the actual setpoint for heating zone 1 when the ”ECO" mode is activated. If the parameter "CH Request type Valve time " is set to "Only OTC", it defines the level for the reduction of the control setpoint for zone 1 heating, if the room thermostat is closed (it can also be set by the user).	0 to 50 (°C)	30 (°C)	Yes
9	Zone2 CH ECO setpoint reduction	Sets the temperature that will be subtracted from the actual setpoint for heating zone 2 when the ”ECO" mode is activated. If the parameter ”CH Request type Valve time " is set to "Only OTC", it defines the level for the reduction of the control setpoint for zone 2 heating, if the room thermostat is closed (it can also be set by the user).	0 to 50 (°C)	5 (C)	Yes
10	ECO shutdown hysteresis CH Zone 1*	If set other than 0 and when the "ECO" mode is active, the CH demand is inhibited when the calculated setpoint is lower than the temperature seton the zone 1 setpoint parameter. The request is unlocked if the calculated setpoints greater than the temperature given by the sum of the parameter setpoint zone 1 + ECO shutdown hysteresis CH Zone 1. This parameter also has an effect if the function is activated via the 'ECO' button.	0 to 20 (°C)	0 (°C)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / CH SETTINGS/ TEMPERATURES					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
11	ECO shutdown hysteresis CH Zone 2*	If set other than 0 and when the "ECO" mode is active, the CH demand is inhibited when the calculated setpoint is lower than the temperature set on the zone 2 setpoint parameter. The request is unlocked if the calculated setpoint is greater than the temperature given by the sum of the parameter setpoint zone 2 + 'ECO' shutdown hysteresis CH Zone 2. This parameter also has an effect if the function is activated via the 'ECO' button.	0 - 20 (°C)	0 (°C)	Yes
12	Zone 1 CH constant setpoint reduction	Defines the level for reducing the control set- point for zone 1 heating when the room thermostat contact is open. Only applies if the CH demand type parameter is set as a constant setpoint (can also be set by the user).	0 - 80 (C)	0 (°C)	Yes
13	Zone 2 CH constant setpoint reduction	Defines the level for reducing the control setpoint for zone 2 heating when the room thermostat contact is open. Only applies if the CH demand type parameter is set as a constant setpoint (can also be set by the user).	0 - 80 (°C)	0 (°C)	Yes

* Caution when using these parameters in combination with the parameters "Zone 1CH ECO and Zone 2 CH ECO setpoint reduction", of this menu and "Zone 1 Offset" , "Zone 2 Offset" of the menu "Outdoor temperature", as it may inhibit the CH demand in an unintended manner.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / CH SETTINGS / OVERTEMPERATURE					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Overtemperature timer*	Each time the burner is switched-on and during the time set by the parameter "Overtemperature timer", the burner is switched-off at a temperature value increased by the parameter ”Overtemperature hysteresis add"	0 to 10 (min)	2 (min)	Yes
2	Overtemperature hysteresis add*		0 to 30 (°C)	5 (°C)	Yes

* 0 = OFF

TECHNICIAN MENU / CH SETTINGS/ TIMING SETTING					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Post pump time	Set the heating pump delay time	0 to 20 (min)	3 (min)	Yes
2	Anticycling timer	Set the anti-cycle timer (minimum time be- tween boiler switch-off and next switch-on)	0 to 15 (min)	3 (min)	Yes
3	CH ramp	The boiler output is adjusted so that the temperature read by the flow sensor increases according to the parameter setting (0 = output increases to the maximum permissible system speed).	0 to 60 (°C/min)	4 (°C/min)	Yes
4	Minimum time	Time during which the burner remains at minimum power for the set time.	0 = 10 (min)	0 (min)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

IMMERGAS

TECHNICIAN MENU / CH SETTINGS / OUTSIDE TEMPERATURE					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Outside temp for max CH	Defines the outside temperature at which the OTC will set the MAX CH setpoint.	-34 to -10 (°C)	-10 (°C)	Yes
2	Outside temp for min CH	Defines the outside temperature at which the OTC will set the MIN CH setpoint.	15 to 25 (°C)	18 (°C)	Yes
3	Outside temp for CH O#	Defines the outside temperature at which OTC will disable CH (even if the room thermostat demand is active).	7 to 25 (°C)	OFF (°C)	Yes
4	Zone 1 Offset	This is the offset value to be added on zone 1 to the setpoint calculated from the OTC curve (can also be set by the user).	-15 to 15 (C)	0 (°C)	Yes
5	Zone 2 Offset	This is the offset value to be added on zone 2 to the setpoint calculated from the OTC curve (can also be set by the user).	-15 + 15 (C)	0 (°C)	Yes
6	Zone 1 Table	Displays the linkage table between "Outside temperature" and the actual setpoint of zone			
7	Zone 1 Curve	Displays the graph of the link between the "Outside temperature" and the actual set- point of zone 1.			
8	Zone 2 Table	Displays the linkage table between "Outside temperature" and the actual setpoint of zone 2.			
9	Zone 2 Curve	Displays the graph of the link between the "Outside temperature" and the actual set- point of zone 2.			

For OTC operation, the parameter "CH Request type" must be set as "Room thermostat OTC" or "Only OTC".

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ DOMESTIC HOT WATER	
1	Power set
2	Temperatures
3	Timing setting
4	Antilegionella*

This parameter section relates only to boiler settings during

DHW operation.

* When "HYDRAULIC SETTINGS/DHW request type" is set to "Thermostat", the item "Antilegionella" will not be present

TECHNICIAN MENU / DOMESTIC HOTWATER/ POWERSET					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Maximum power	Sets the percentage of maximum boiler power in the "DHW" mode.	Minimum to 100 (%)	50 (%)	Yes
2	Minimum power	Sets the minimum boiler power percentage in the "DHW" mode.	0 to Maximum power (%)	0 (%)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

When Thermostat is set in Technician menu/HYDRAULICSETTINGS/DHW request type, the table below will look like this:

TECHNICIAN MENU /DOMESTIC HOT WATER/ TEMPERATURES				
Menu	**Description**	**Range**	**Default**	**Restore settings**
Storage temperature setpoint	Sets the flow temperature during the "DHW“ mode.	35 + 87 (°C)	80 (°C)	Yes

TECHNICIAN MENU/ DOMESTIC HOT WATER/ TEMPERATURES					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	DHW max setpoint	Set the "DHW maximum setpoint"; if set lower than "DHW setpoint", this parameter will adjust to the new value and remain there even if the parameter "DHW maximum setpoint" is increased.	40 to 87 (C)	65 (°C)	Yes
2	DHW setpoint	Set the "DHW setpoint" (which can also be set by the user).	20 to DHW max setpoint (°C)	65 (°C)	Yes
3	DHW setpoint hysteresis	Set "DHW set point hysteresis".	0 to 10 (C)	5 (°C)	Yes
4	DHW storage offset	This value added to "DHW setpoint" determines the flow setpoint during the "DHW“ function.	0 to 30 (C)	15 (°C)	Yes
5	ECO setpoint reduction	Sets the temperature that will be subtracted from DHW setpoint when the "ECO" mode is activated (can only be changed by accessing Technician menu).	0 to 50 (°C)	20 (°C)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ DOMESTIC HOT WATER / TIMING SETTING					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Post pump time [sec]	Set the "DHW Post pump" time in seconds.	0+59 (s)	0 (s)	Yes
2	Post pump time [min]	Set the time for "DHW Post pump" in minutes.	0 + 30 (min)	3 (min)	Yes
3	Overtemperature timer	Each time the burner is switched on and during the time set by the parameter "Overtemperature timer", the burner is switched off at the flow setpoint increased by 4°C.	0 + 255 (s)	60 (s)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

IMMERGAS

TECHNICIAN MENU/ DOMESTIC HOT WATER/ ANTILEGIONELLA					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Function *	Activates or deactivates the function (ON / OFF mode).	Disabled - Enabled	Disabled	Yes
2	Setpoint *	Defines the setpoint "DHW" (*only with DHW probe*) during the antilegionella function.	60 + 87 (°C)	60 (°C)	Yes
3	Duration *	Defines the maximum time of the Antilegionella prevention function. (If the set setpoint is not reached within the time set in this parameter, a message appears on the display.)	15 + 255 (min)	15 (min)	Yes
4	Period	Defines the repetition period of the 'Antilegionella' function. *This parameter is used when hourly / daily programming* ***is not set.*** Holiday and DHW ECO mode has no impact on anti-legionella	24 + 168 (h)	168 (h)	Yes
5	Day of the week ***	Defines the day of the week on which the 'Antilegionella' function will be activated.	Monday Sunday	Sunday	Yes
6	Hour of the day ***	Defines the time of day when 'Antilegionella' will be activated.	0 + 23 (h)	2 (h)	Yes
7	Manually force****	This parameter only appears if the parameter "Function" is enabled and the DHW is not disabled via the MODE button. The function will stop when the duration or set point is reached.			

* This parameter is used regardless of whether time programming is active or not.

*** This parameter is used when hourly/ daily programming is set

****Note: over 90% of Legionella are killed in under 10 minutes at 60°C and in around one hour at 55°C.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS	
1	Fan parameters
2	Pump parameters
3	Delta T parameters
4	Boiler antifreeze protection
5	Additional antifreeze protections
6	Decreasing slope
7	User interface settings
8	Anti-humidity settings
9	Modbus parameters
10	Maintenance

This parameter section concerns the boiler adaptation of the system.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS / FAN PARAMETERS					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Ignition speed *	Sets the speed used during burner ignition.	750 to 6750 (rpm)	See paragraph on I.B.	No
2	Maximum speed **	This defines the max fan speed and therefore the maximum relative operating power of the appliance. If you need to vary the CH and DHW output of the appliance, use the parameter "Maximum power".	MIN speed 12750 (rpm)	See table paragraph on I.B. Variable heat output".	No
3	Minimum speed***	This defines the min fan speed and therefore the minimum relative appliance operating power.	300 to MAX speed	See table paragraph on I.B. Variable heat	No
4	Post purge speed	Defines the fan speed in the post purge phase	0-12750 (rpm)	See table paragraph on I.B.	No

* This parameter can be stored at a value greater than "MAX speed" and less than “MIN speed" but functionally, it will be limited by these two parameters.

** When changing the value, it is possible to exceed the limit set by the parameter "MIN speed", but when confirming, the previously stored value is retained.

*** When changing the value, the limit set by the parameter "MAX speed" can be exceeded, but when confirming, the previously stored value is retained.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS / PUMP PARAMETERS					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Feedback	Disabled = pump feedback ***is not used*** Enabled = pump feedback is used	Disabled Enabled	Enabled	No
2	Feedback signal type	PWM = the pump feedback signal is a PWM based signal (Wilo or Grundfoss) RELAY = the pump feedback signal is a signal based on RELAY potential-free contact. (ON / OFF)	PWM / RELAY	Default = PWM RELAY (only for model 150)	No
3	Pump Minimum speed	Defines the minimum pump speed expressed as a percentage (do not go below the default value).	1 to 100	30%	No
4	Pump Maximum speed	Defines the maximum pump speed expressed as a percentage.	1 to 100 %	100 %	No
5	Pump start speed	Defines the speed of the circulator during the burner ignition phase (do not go below the default value)	1 to 100 %	50 %	No
6	CH pump continuous operation	Enables continuous pump operation in CH mode	Disabled Enabled	Disabled	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ SYSTEM SETTINGS / DELTA T PARAMETERS					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Pump control	The pump speed increases in order not to exceed the value set in this parameter.	1 to 30 (°C)	18 (°C)	Yes
2	Power control	The boiler output is reduced not to exceed the value set in this parameter (Caution, do not change this parameter)	0 to 60 (°C)	25 (°C)	Yes

With the appliance in CH mode, the speed of the circulator modulates in this way:

- proportionally between the value set in parameter 'Minimum and Max pump speed' value in relation to the boiler output (0 % - 100 %);
- increasing the speed so that the boiler does not exceed the ΔT (between system flow and return) as per 'Pump control' parameter.

In **DHW mode**, the circulator always runs at full speed.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS / BOILER ANTIFREEZE PROTECTION					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Antifreeze activation temperature	Defines the antifreeze activation threshold. This threshold is monitored by the system sensor (if present) in order to protect the system.	0 + 14 (°C)	9 (°C)	Yes
2	Antifreeze deactivation temperature	Defines the antifreeze deactivation threshold. This threshold is monitored by the system sensor (if present).	15 + 40 (°C)	35 (°C)	Yes

ANTIFREEZE PROTECTION

The appliance has an antifreeze function that switches the burner on automatically when the temperature drops below 9°C (standard protection to minimum temperature of-5°C).

In order to guarantee the integrity of the appliance and the DHW heating system in are as where the temperature drops below zero, we recommend protecting the central heating system using anti-freeze liquid and installing the Immergas antifreeze Kit in the appliance.

If there is a storage tank in the system and a DHW probe, the burner is switched on when the temperature measured by the probe falls below 6°C and is switched off above 15°C.

For the antifreeze function to work properly, the storage tank must be filled with water; otherwise, the antifreeze can operate continuously.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ SYSTEM SETTINGS /ADDITIONAL ANTIFREEZE PROTECTIONS					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Antifreeze activation temperature	Defines the antifreeze activation threshold. This threshold is monitored by the (system) sensor (if present) in order to protect the system.	2 to20 (°C)	5 (°C)	Yes
2	Antifreeze deactivation temperature	Defines the antifreeze deactivation threshold. This threshold is monitored by the system sensor(if present).	2 to -20 (°C)	15 (°C)	Yes
3	Outside temperature pump activation	Defines the threshold for activating the system's circulators with reference to the temp. measured by the external probe (if present).	-30 + 10 (°C)	-10 (°C)	Yes

The appliance is equipped with a function that starts the burner if the system flow water is below 9°C.
The burner is **switched off** when the system flow water reaches approximately 35°C.
Depending on the hydraulic configurations and options installed, there may be additional antifreeze functions:
- **System sensor**: the burner is switched on when the temperature measured by the sensor falls below the parameter "System settings/ Additional antifreeze protections/Antifreeze activation temperature" and is switched off when it reaches the value set in the parameter "System settings/Additional antifreeze protections/Antifreeze deactivation temperature".
- **Mixed probe**: the burner is switched on when the temperature measured by the probe falls below 3°C and is switched off above 15°C.
- **External sensor**: in this case the burner is not activated, but the pumps run (for activation of the various pumps). Activation takes place when the temperature measured by the probe itself falls below the parameter "System settings/Additional antifreeze protections/Outside temperature pump activation" while switch-off occurs when the temperature exceeds the same parameter by 2°C.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS / DECREASING SLOPE					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Power threshold	The "Decreasing slope" is only activated each time the burner is switched on. The "Decreasing slope" is activated when the boiler output (in %) falls below the threshold set in the parameter.	0 to 100 (%)	50 (%)	Yes
2	Step time	Defines the time of the power decrease step.	0 to 255 (s)	9 (s)	Yes
3	Rapid power change time	This is the maximum duration of 'Function'.	0 to 10 (min)	3 (min)	Yes

TECHNICIAN MENU / SYSTEM SETTINGS/ ANTI-HUMIDITY SETTINGS					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Anti-humidity function	This activates "Function" of the heat exchanger.	OFF - ON (min)	OFF (min)	Yes
2	Fan speed	Defines the fan speed during this "Function".	0 to 12750 (rpm)	3000 (rpm)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS / DECREASING SLOPE					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Power threshold	The "Decreasing slope" is only activated each time the burner is switched on. The "Decreasing slope" is activated when the boiler output (in percent) falls below the threshold set in the parameter.	0 to100 (%)	50 (%)	Yes
2	Step time	Defines the time of the power decrease step.	0 to 255 (s)	9 (s)	Yes
3	Rapid power change time	This is the maximum duration of 'Function'.	0+10 (min)	3 (min)	Yes

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / SYSTEM SETTINGS / ANTI-HUMIDITY SETTINGS					
item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Anti-humidity function	This activates "Function" of the heat exchanger.	OFF – ON (min)	OFF (min)	Yes
2	Fanspeed	Defines the fan speed during this "Function".	0 + 12750 (rpm)	3000 (rpm)	Yes

ANTI-HUMIDITY

With cascade installations combined with their relative flue manifold kits with flue adjusting devices, humidity may develop on the electrodes, causing them to fail.
The function is active when the burner is off and the flow NTC probe temperature reading is greater than 35°C. The function is disabled when the temperature drops below 30 °C.
To prevent the formation of moisture, enable this function (by setting the parameter "System settings/Anti-humidity / settings/ Antihumidity function" to "ON").
The fan cycles ON-OFF at the speed set in parameter "Fan speed" (5 minutes on and 5 minutes off).

In the event of simultaneous activation of the "Anti-humidity" electrode function and the "CH pump continuous operation“ function, more heat is expelled from the chimney.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU /SYSTEM SETTINGS/ MODBUS PARAMETERS					
Item	**Menu**	**Description**	**Range**	**Default**	**Restore settings**
1	Address	Allows the assignment of the Modbus slave address (when used with BMS systems).	1 to 247	1	Yes
2	Baud rate	Modbus transmission rate.	1200 - 2400 4800 - 9600 19200 - 38400	9600	Yes
3	Frame	The first digit (8 fixed value) defines the number of bits per byte. The second digit defines parity (N = No / E = Even / O = Odd). The third digit defines the stop bit (1-2 = Stop bits)	8O1 8El 8N1 802 8E+2 8N2	8E+1	Yes

BMS mode (Building Management System)

When the BMS is activated and operational, the icon “ " is displayed (Control panel).

The device connected to the BMS must only be controlled by it and *not by other modes.* (Open-therm, 0-10V, Cascade and zone regulator, room thermostat, CH and DHW demand type parameter).

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ SYSTEM SETTINGS / MAINTENANCE		
item	**Menu**	**Description**
1	Service information	Used to enter the telephone number of the service centre (parameter entered by the service centre performing the maintenance).
2	Service due date	Date of next maintenance (relating to the last maintenance carried out and completed by the technician carrying out the maintenance).

TECHNICIAN MENU / MANUAL TEST		
item	**Menu**	**Description**
1	Chimney sweep	Activates "Function" "Chimney sweep" for single boiler or for one or more boilers if simple cascade installation.
2	Manual relay test	Check the "Function" associated with the relay previously set in "Technician menu/HYDRAULIC SETTINGS/Relay settings". The "Function" can be deactivated manually, but in any case it is deactivated automatically after 30 minutes. In the case of simple cascade, the function can only be activated by the Master BOILER.

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU/ MANUAL TEST/ MANUAL RELAY TEST			
Menu	**Description**	**Range**	**Default**
System pump	The relay associated with "function" is activated if previously configured in "Technician menu / HYDRAULIC / SETTINGS / Relay settings".	OFF - ON	OFF
DHW			
System fault			
3—way valve CH			
3 —way valve DHW			
Burner on			
Mixing valve: opens			
Mixing valve: closes			

TECHNICIAN MENU / DEAERATION					
Menu item		**Description**	**Range**	**Default**	**Restore settings**
1	Automatic function	Enables/disables the automatic operation of the short function after each power-up of the boiler.	Disabled Enabled	Enabled	Yes
2	Manual shorter function	Activate "Manual shorter function" once. (cycle duration: 8 minutes).			
3	Manual longer function	Activate "Manual longer function" once. (cycle duration: 18 hours).			

VICTRIX PRO V2 - PCB SETTING - Technical Menu

TECHNICIAN MENU / CASCADE	
1	Settings
2	Single burner power
3	Autodetect
4	Parameter synchronization

The parameter 'Autodetect' is also used by the individual device.
Although the remaining parameters are also present on the individual boiler, they can be set when the appliance is part of a cascade installation.
For setting and explanation of parameters, please refer to the cascade booklet.

TECHNICIAN MENU/ RESTORE SETTINGS	
Menu	**Description**
Restore settings	Caution: Read and understand the device instructions before performing the reset operation. Press the 'OK' button (for about 3s) to reset the settings, any other button to retain the current settings. N.B. : see the "Restore settings" column of "Technician menu" for each parameter that can be reset to factory settings or a set value. N.B. : the newly reset parameters are to be configured according to plant requirements. For simple cascade, please refer to the cascade booklet.

The "Restore settings" column in the following tables represents the parameters that can be reset to default values or another value (indicated in the column itself) by means of a specific item in Technician menu, by the Maintenance technician.

For simple cascade, please refer to the cascade booklet.