

# **OIMMERGAS**

## **DOMINUS CAT**

Control Application Remote Boiler



#### Dear Customer,

We wish to complement you for having chosen a top-quality Immergas product, that can assure you long-term well-being and safety.

As an Immergas customer you can also count on a qualified after-sales service, prepared and updated to guarantee constant efficiency of its application "Dominus Cat".

We would like to provide you with some important indications, your observance of which will ensure your satisfaction with the Immergas product:

- Read the following pages carefully: you will find useful suggestions regarding the correct use of the application.
- For assistance and scheduled maintenance, contact "Immergas Authorised After-Sales centres": they have original spare parts and are specifically trained.

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#### 1. SEARCH RECORDED DEVICES

Open the "Dominus Cat" application; the following screen appears on display (Fig. 1) where to enter the access credentials to the application.

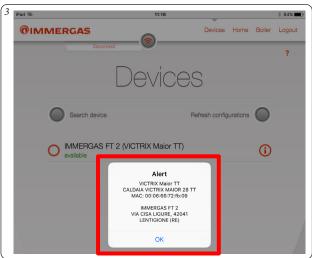


Ref.	Description		
1	Username: enter the name of the recorded technician.		
2	Password: enter the password of the recorded technician.		
3	Logic button: press to confirm access to the "Dominus C application		

When the "Login" button is pressed (pos. 3, Fig. 1), the following page is displayed (Fig. 2) listing the last searched devices and those available (pos. 4, Fig. 2).



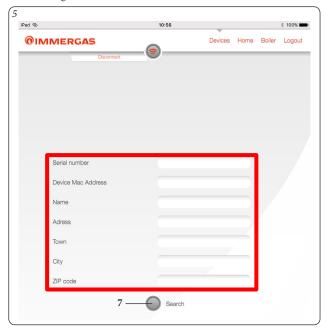
Pressing the button (pos. 5, Fig. 2) displays a pop-up with the information of the connected boiler (Fig. 3).



If there is no device, the following screen is displayed:



Press the button (pos. 6, Fig. 4) to display the following screen (Fig. 5) that allows setting the filters to search the recorded devices.



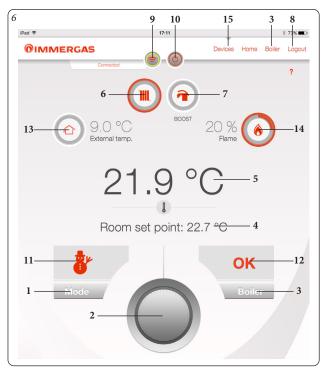
Press the button (pos. 7, Fig. 5) to enable the filters and run the search.

N.B.: Always fill-in at least one field before searching.

Selecting one of the devices "available" accesses its "Home" page (Fig. 6).



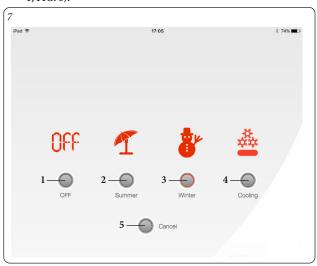
#### 2. DESCRIPTION OF THE "HOME" PAGE.



Ref.	Description	
1	Operation mode access button.	
2	"Set Room" temperature adjustment knob.	
3	"Boiler" page access button	
4	Display room temperature set.	
5	Display room temperature measured.	
6	Display current boiler operation (central heating).	
7	Display current boiler operation (domestic hot water).	
8	"Logout" button.	
9	Wi-Fi connection with boiler enabling button (flashes to indicate active connection).	
10	"Enable device" page access button.	
11	Display mode of operation.	
12	Display boiler status.	
13	Outdoor temperature display.	
14	Flame modulation percentage display.	
15	"Devices" page access button (Fig. 2).	

N.B: the parameters displayed depend on the type of boiler to which the Wi-Fi module is connected.

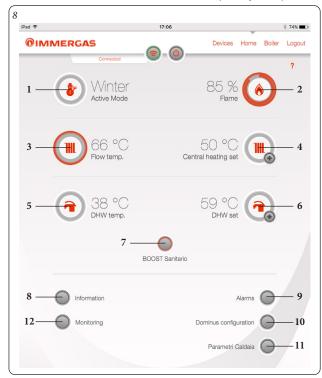
## 2.1 DESCRIPTION OF THE "MODE OF OPERATION" PAGE (REF. 1, FIG. 6).



Ref.	Description	
1	OFF - Boiler off.	
2	Summer - Only the DHW central heating function is enabled.	
3	Winter - DHW heating and room central heating buttons are enabled.	
Cooling - The cooling and DHW central heating function enabled.		
5	Cancel - Pressing this returns to the "Home" page (Fig. 6).	



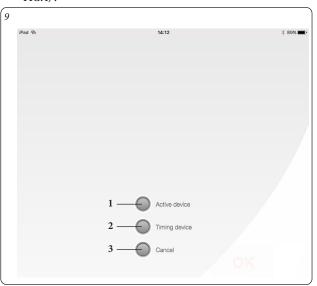
#### 2.2 DESCRIPTION OF THE "BOILER" PAGE (REF. 3, FIG. 6).



Ref.	Description	
1	Display mode of operation.	
2	Flame modulation percentage display.	
3	CH water temperature display.	
4	Set CH water temperature display. Pressing the button ( ) allows access to the CH water temperature adjustment page.	
5	DHW temperature display.	
6	Set DHW temperature display. Pressing the button ( allow access to the DHW temperature adjustment page.	
7	"Boost DHW" enable button (the presence or not of the button depends on the boiler model).	
8	"Information" page access button.	
9	"Alarms" page access button.	
10	"Dominus Configuration" page access button.	
11	"Boiler Parameters" page access button.  "Monitoring" page access button.	
12		

 $\mathbf{N.B:}$  the parameters displayed depend on the type of boiler to which the Wi-Fi module is connected.

## 2.3 DESCRIPTION OF THE "ENABLE DEVICE" PAGE (REF. 10, FIG.4) .



Ref.	Description	
1	Active Device - The "Dominus Cat" application takes control of the boiler until it is disabled or until the Wi-Fi connection is lost. As soon as the device is disabled, control returns to the device present on site.	
2	Timing Device - The boiler is controlled by the "Dominus Cat" application until the time set during the setting selection ends. At the end of the set time, control returns to the device on site.  N.B.: In case of timed activation, to disable the device you must reset the remaining time.	
3	Cancel - Pressing this returns to the "Home" page (Fig. 6).	



#### 3. START-UP.

The below-described adjustment functions are always enabled if a Room Thermostat, or similar, is connected to the device; if the Dominus Cat device is connected to a  $CAR^{V^2}$ , the below-described functions are only enabled if the device is activated (see Fig. 9).

#### 3.1 SELECTION OF OPERATING MODE.

According to the functioning mode selected, the "Dominus Cat" application performs the requests of the user, displaying the results on the display. Through the "Operation mode" access button (ref. 1 fig. 6) the following functions can be selected: OFF, Summer, Winter, Cooling.

Note: the room antifreeze function is active in the modes: summer, winter.

- **Off mode.** The room anti-freeze function is not guaranteed in this mode (the boiler anti-freeze function remains active).
- Summer mode (4). In this mode the boiler is enabled for producing domestic hot water excluding heating the environment. The display will show the data relating to this operation mode.
- Winter mode (a). In winter mode the boiler is enabled for producing domestic hot water and for central heating the environment. The display will show the data relating to this operation mode and the room temperature
- Cooling mode ( ). In cooling mode the boiler is enabled for the production of DHW and to control an outdoor condensing unit (only for models set-up) for cooling rooms. The display will show the data relating to this operation mode.

#### 4. SUMMER MODE FUNCTIONS.

With the "Dominus Cat" application in summer mode ( $\P$ ), only the production of DHW is enabled.

The boiler produces hot water according to the DHW temperature set on the "Dominus Cat" application.

#### 4.1 DHW TEMPERATURE SETTING.

Pressing the button ( on the boiler page (ref. 6, fig. 8) allows setting the DHW temperature.

The temperature is memorised after the button is pressed.

#### 5. WINTER MODE FUNCTIONS.

With the boiler in winter mode ( ), the production of DHW and room central heating are enabled.

The room temperature is maintained constant at the value set by the user when the room temperature value is available; otherwise, the flow temperature set in the boiler menu is maintained.

#### 5.1 TEMPERATURE SETTING.

Pressing the button ( on the boiler page (ref. 6, fig. 8) allows setting the DHW temperature.

The temperature is memorised after the button is pressed.

To set the desired room temperature, simply rotate the knob (ref. 2, fig. 6) on the "Home" page. The display will show, in real time, the room temperature set (ref. 4, fig. 6).

Any room temperature from +10°C to +35°C can be selected, which will be kept constant until new adjustments are made or a different mode is selected.

From the winter function mode (8) it is possible to regulate the boiler flow temperature. The adjustment is made by pressing the button (1) on the boiler page (ref. 4, fig. 8). The temperature is memorised after the button is pressed.

**N.B.:** an excessively low boiler flow temperature adjustment (below 60°C for traditional systems) may not allow to reach the desired room temperature.

The boiler flow temperature during normal functioning is however managed automatically by the "Dominus Cat" application on the basis of the room temperature set. Therefore, it is not certain that the boiler works at the temperature set but functions at a lower flow temperature, but correct to obtain the desired room temperature inside the information menu.

#### 5.2 ROOM ANTI-FREEZE FUNCTION.

The antifreeze function has maximum priority with respect to other settings. When the room temperature drops below  $5^{\circ}$ C a heating request at minimum programmed power is made. This situation remains active until there is a variation in room temperature of  $0.6^{\circ}$ C equal to  $5.6^{\circ}$ C measured in the room where the boiler is positioned.

### 5.3 FUNCTIONING IN WINTER MODE WITH OUTDOOR TEMPERATURE PROBE.

If an outdoor temperature probe is present, it is possible to set a flow temperature correlation curve depending on the outdoor temperature.

#### 6. COOLING MODE FUNCTIONS.

With the boiler in cooling mode (4), both the DHW heating and room cooling functions are enabled.

**Attention:** this function can only be used with Immergas appliances that manage the cooling mode.

The room temperature is maintained constant at the value set by the user when the room temperature value is available; otherwise, the flow temperature set in the boiler menu is maintained.

#### 6.1 TEMPERATURE SETTINGS.

Pressing the button ( on the boiler page (ref. 6, fig. 8) allows setting the DHW temperature.

The temperature is memorised after the button is pressed.

To set the desired room temperature, simply rotate the knob (ref. 2, fig. 6) on the "Home" page. The display will show, in real time, the room temperature set (ref. 4, fig. 6).

Any room temperature from  $+15^{\circ}$ C to  $+40^{\circ}$ C can be selected, which will be kept constant until new adjustments are made or a different mode is selected.

#### 6.2 FLOW TEMPERATURE.

From the cooling function ( ), the system flow temperature during normal operation is managed automatically by the "Dominus Cat" application on the basis of the set room temperature. If the room probe is excluded, the flow temperature will not be managed by the "Dominus Cat" application but will be defined according to the parameters set in the internal hydronic unit.

**N.B.**: if the outdoor temperature probe is present, the flow temperature will be set according to adjustments in the internal hydronic unit.

**N.B.:** modulating flow temperature operation is only present on pre-set Immergas appliances.



#### 7. INFORMATION

From the boiler page (Par. 2.2), pressing the "Information" button (Ref. 8, Fig. 8) displays the following screen.



#### 8. DIAGNOSTICS AND ERRORS

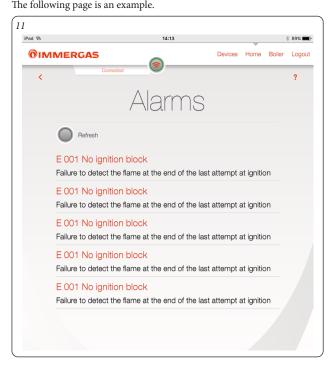
#### 8.1 DIAGNOSTICS.

The "Dominus Cat" application continually controls the functioning status of the boiler and signals any anomalies, stating the corresponding error code on the display.

The error codes have meaning depending on the boiler to which the "Dominus Cat" application is connected. Therefore, refer to the boiler instruction book for a complete list of error codes and their relative meaning.

In the case of a fault that cannot be reset, contact a qualified technician (e.g. the Immergas After-Sales Technical Assistance Service).

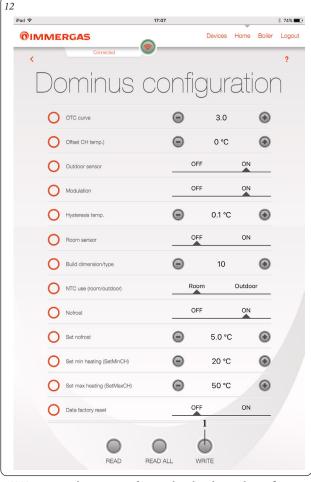
"Exxx" appears on the display of the "Alarms" page in the event of an error, where "xxx" stands for the number that identifies the error code.



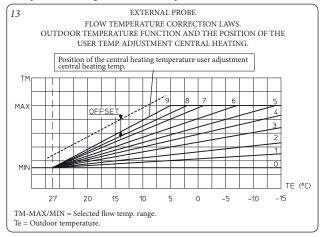
#### 9. DOMINUS CAT CONFIGURATION.

From the boiler page (Par. 2.2), pressing the "Dominus Configuration" button displays the following page from where to edit the main parameters set in the device.

After making any changes, press the "Write" button (Ref. 1, Fig. 12) to send them and make them active.



- OTC curve: in the presence of external probe, change the set flow temperature (see fig. 13), standard set at 3.
- Offset CH temp.: constant that can be regulated from -15°C to +15°C and in the presence of the external probe (optional), modifies the set flow temperature (see fig. 13) set to 0°C as per standard.



- External probe: enables/disables the operation curve (Fig. 13) if the external probe is present.
- Modulation: allows enabling (ON) or disabling (OFF) the operation of the flow temperature modulation. Set at ON, the flow temperature will be varied depending on the room temperature set. Set at OFF, the flow temperature will be kept constant until the desired room temperature is reached. (Setting to be made on systems with zones control unit).



 ${\bf N.B.}$ : if an outdoor temperature probe is present, the flow temperature will be set depending on the relative functioning curve.

- Hysteresis temperature: with room probe enabled, it indicates the temperature added to the set, above which the request to the generator is removed.
- Room probe: allows to activate or deactivate the room probe. On the basis of the parameter setting, it will be possible to regulate the following options:
- ON (standard value); it is possible to select a correction factor of the room probe reading and change the modulating function.
- OFF, the system will not function, regulating the room temperature but only depending on the time program set. In this case the room anti-freeze function is not assured.
- Build dimension/type: adjustable from 1 to 20, standard set at 10. It establishes the system reaction speed according to the type of system present. For example:

Valu	.e	System type	
5 system with little heat inertia 10 system with normal dimensions with radiators 20 system with a lot of heat inertia (e.g. floor-standing system		system with little heat inertia	
		system with normal dimensions with radiators	
		system with a lot of heat inertia (e.g. floor-standing system)	

- NTC use (room/outdoor temp.): allows selecting the use of the room sensor or of the external probe.
- Nofrost: allows enabling/disabling the antifreeze function.
- Set nofrost: allows setting the room temperature for activation of the anti-freeze function. Can be regulated from 0°C to 10°C and is set at 5°C as standard.
- Set minimum central heating (SetMinCH): allows to regulate the central
  heating flow minimum temperature value. Moreover, this value is used
  to calculate the curves used for the external probe. Values that are too
  high can cause flow temperatures that are too high on average for room
  central heating.
- Set maximum central heating (SetMaxCH): allows to regulate the maximum CH flow temperature value.
- · Data factory reset

#### 10. BOILER PARAMETERS

From the boiler page (Par. 2.2), pressing the "Boiler Parameters" button displays the following page from where to edit all the main parameters set in the boiler.

**N.B.:** The displayed parameters change upon the varying of the boiler model to which they are connected.

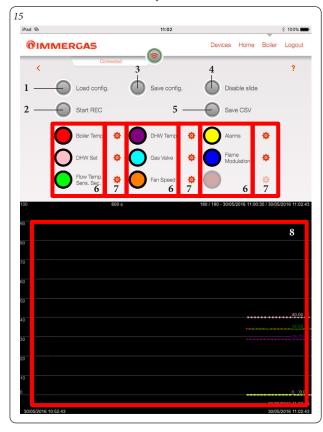


Ref.	Description	
1	Write: pressing this button sends the value of the selected parameter to the boiler and enables it.	
2	Write all: pressing this button sends all values of the parameters on this page to the boiler and enables them.	
3	Load: pressing this button allows loading a configuration stored on the display device (smartphone, tablet) in the application.	
4	Save: pressing this button saves the configuration currently displayed on the device (smartphone, tablet) in its memory in order to load it at a later time.	



#### 11. MONITORING

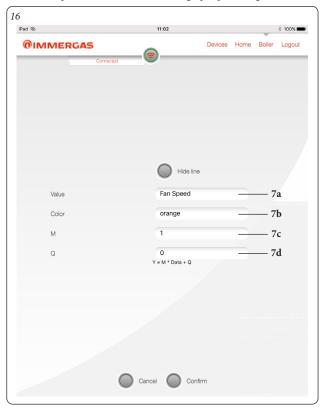
From the boiler page (Par. 2.2), pressing "Monitoring" displays the following screen from where to monitor the parameters in the boiler.



Ref.	Description		
1	Load config.: pressing this button loads the configuration of the parameters (pos. 6) saved in the display device memory (smartphone, tablet).		
2	Start/Stop recording: pressing this button records the trend of the displayed parameters (pos. 8).  Once stopped, the recording is saved in the display device memory (smartphone, tablet).		
3	Save config.: pressing this button saves the configuration of the parameters (pos. 6) displayed in the display device memory (smartphone, tablet).		
4	Pause/Resume sliding: pressing this button momentarily stops the graphic display of the parameters (pos. 8).  Press the button again to resume display.		
5	Export CSV: pressing this possible exports in "csv" format the recording made (2) (see figure 17) in the display device memory (smartphone, tablet).		
6	List of parameters If selected, the parameter becomes active and its curve is displayed on the graph (pos. 8).		
7	Parameter configuration buttons (see Fig. 16).		
8	Graphically displays the selected boiler parameters (pos. 6). Using the touch-screen you can enlarge/reduce or move the graph by using you fingers.		

**N.B.**: The "Monitoring" only works when on the appropriate page and connected to the boiler (by overshadowing the application, the "Monitoring" does not work and the application disconnects from the generator).

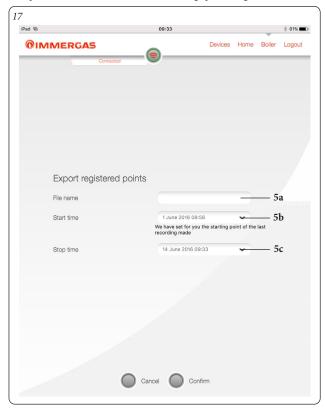
Pressing the buttons (pos. 7, Fig. 15) displays the following screen where to select which parameters to monitor in the graph (pos. 8, Fig. 15).



Ref.	Description	
7a	Value type: pressing the field displays a drop-down menu listing the selectable boiler parameters.	
7b	Colour: allows assigning a colour to the selected parameter curve (7a).	
7c	M (multiplier): amplifies the value of the selected parameter curve (7a).	
7d	Q (offset): shifts the curve of the selected parameter vertically (7a).	



Pressing the button (pos. 5, Fig. 15) displays the following screen from where to export in "csv" format the made recording (pos. 2, Fig. 15).

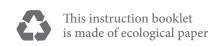


	Ref.	Description
	5a	File name: assigns a name to the recording to be saved.
	5b	Start date and time: sets the start date and time of the recording to be saved.
5c		End date and time: sets the end date and time of the recording to be saved.

#### 12. CONFIGURATIONS MANAGEMENT

Device connected to Dominus Cat	Parameters management with Dominus Cat con- nection	Dominus Cat activa- tion via APP	
Room Ther- mostat or sim- ilar system.	The mode, the flow and DHW set must be set within the app. The boiler will be activated in the presence of request of the connected Room Thermostat.	The forcing is only enabled with the consent of the room thermostat inlet; use the Dominus Cat relay to enable the consent, see the diagram. The flow set is the same calculated before the activation.	
Room Ther- mostat or sim- ilar system + room probe connected to Dominus Cat.	The mode, the flow and DHW set must be set within the app; also, the desired values must be set in the Dominus Cat parameters menu for enabling the boiler flow modulation. The boiler will be activated in the presence of request of the connected Room Thermostat and according to the room set set by the app.	The forcing is only enabled with the consent of the room thermostat inlet; use the Dominus Cat relay to enable the consent, see the diagram. The flow set is the same calculated before the activation.	
Room Ther- mostat or sim- ilar system + room probe connected to Dominus Cat in error.	The mode must be set within the app while the flow set is set to minimum with room modulation present. The boiler will be activated in the presence of request of the connected Room Thermostat.	The set is set to minimum by WFC with request in progress.	
CAR connected to Dominus Cat.	The boiler is entirely managed by the CAR system.	The boiler is entirely managed by Dominus Cat according to the parameters set on the App.	







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