

Controller manual

for the qualified professional

applicable to:

Nesta range

Nesta Plus range

Nesta Chrome

60·80·100·120 kW

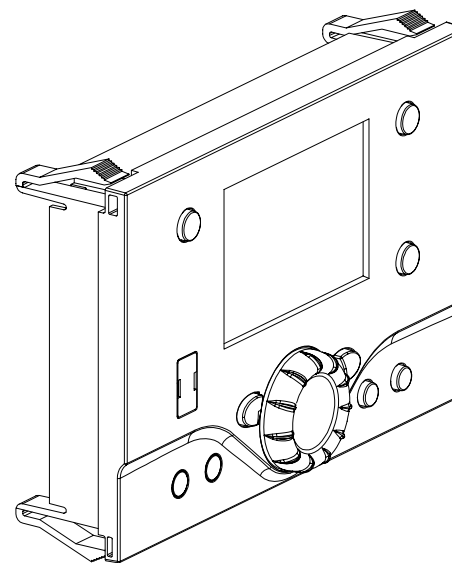


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INTRODUCTION

General

Dear Expert,

this manual complements the Installation and Operation Manual of your appliance.


It provides further information on the controller installed in the Nesta and Nesta Plus boilers and in the early models of Nesta Chrome boilers: its controls, the structure of the menus, the default parameters, the meaning of error codes, etc.

Please note that two versions, either grey or white, of such controller are installed in AIC products, containing different sets of languages. Refer to **“Language” on page 11** for the detail of available languages.

Interactive Features

This manual is comprised of interactive features that will allow you to navigate through the pages:

- ▶ Interactive table of contents in the book itself and through the bookmark function of your PDF application
- ▶ Interactive cross-references
- ▶ Active buttons and references

In the table containing the list of menus and functions of the controller, each function in the top menu shows an  icon. Clicking on it opens an explanatory window for the function. Clicking on the window closes it.

When navigating through the pages, remember you can always come back to the page seen previously by clicking on the  icon appearing at the top right corner of the page.

CONTROLLER OPERATION

Control Panel and Main Functions

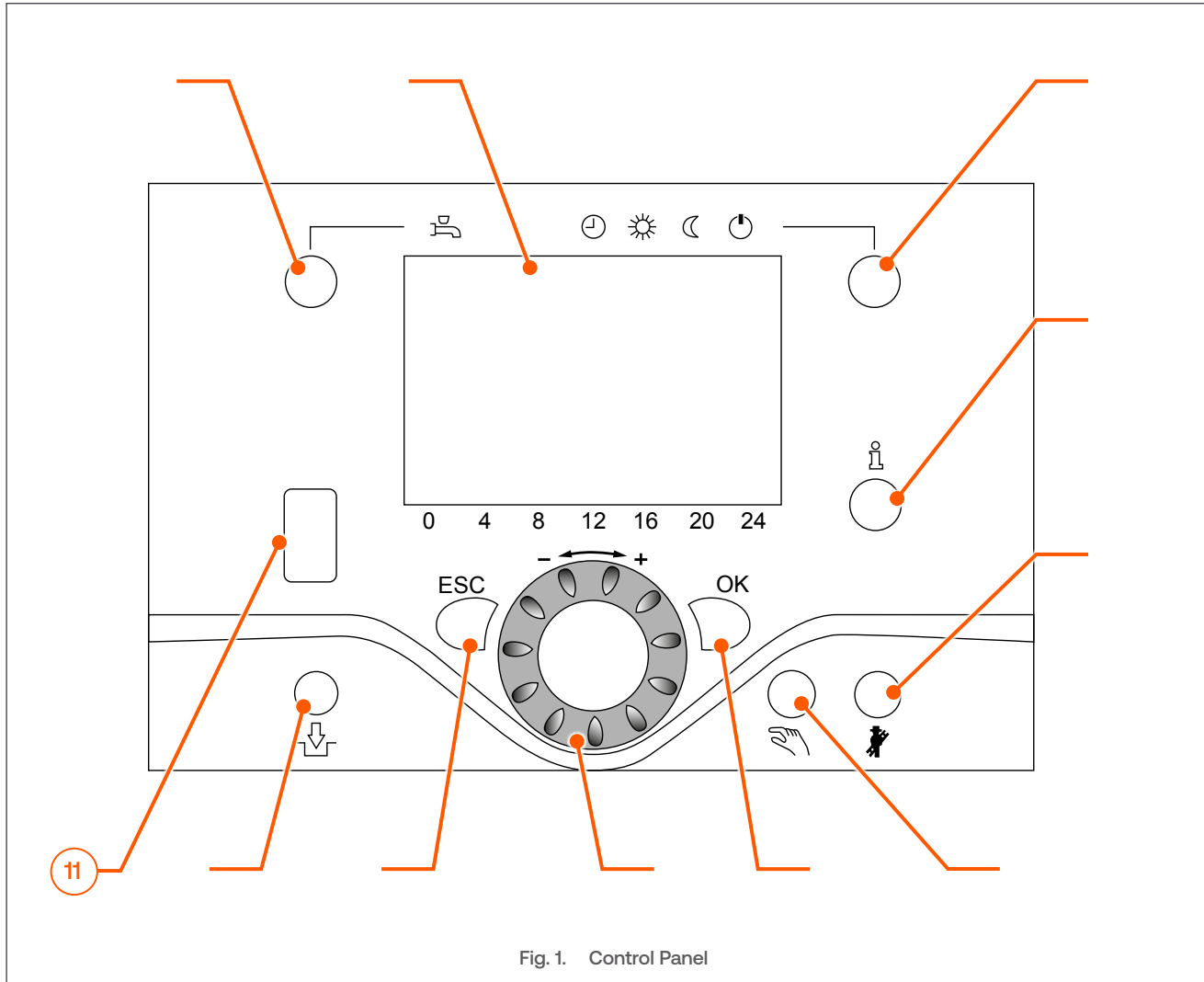


Fig. 1. Control Panel

KEY






1. **Domestic Hot Water on/off button** - Pressing this button activates/deactivates of the Domestic Hot Water function (🚰).
2. **LCD Display** - The display illuminates whenever a control is depressed, and remains on for 8 minutes. For a detail of the symbols and messages displayed on the screen, see **"Symbols and Messages on the Control Panel"**.
3. **Heating mode selection button** - Pressing this button activates/deactivates one of the four following heating mode:
 - Automatic mode (🕒)
 - Comfort mode (☀️)
 - Reduced mode (🌙)
 - Protection mode (🔒)
4. **Information display button** - Pressing this button displays more information on the screen (e.g. details of an error or maintenance code, special mode messages and INFO lines). It also allows to access the various user levels of the controller menu.
5. **Chimney sweep function button** - This button allows to perform a measurement of the flue gas contents.
6. **Manual operation mode button** - The operation depends on the function defined for the relays (Expert Level). It can also be used to activate the bleeding function using an air purge installed at all high points of the circuit.
7. **Confirmation button** - This button allows to access the setting menus for the end user, and to validate a value or a selection.
8. **Rotary selection knob** - Turning the knob to the left or to the right allows to scroll through the menus or increase/decrease a value.
9. **Escape button** - To cancel any ongoing operation or go back to the Home screen.
10. **Reset button** - To reset an error code displayed on the screen.
11. **Service Socket (BSB)** - Not used

For more information on the operation and menus of the controller, see **"Menus and Settings"**.

CONTROLLER OPERATION

Symbols and Messages on the Control Panel

The following symbols are present **on the control panel**:

-  **Domestic Hot Water mode.** At activation, this mode also ensures that the water is heated up to 65°C once a week to prevent any development of legionella bacteria in the DHW circuit. When activated, a black line is displayed under the symbol.
-  **Automatic mode.** This mode operates the boiler according to a scheduled programme, using the setpoints defined for the Comfort (☀) and Reduced (☾) modes. The ECO function is active (automatic summer/winter changeover). It also allows the anti-frost and overheating protections to be active. When this mode is activated, a black line is displayed under the symbol.
-  **Comfort mode.** This mode operates the appliance, up to the temperature setpoint defined for the Comfort operation and maintains it continuously (no scheduler). It also allows the anti-frost and overheating protections to be active. The ECO function is **NOT** active (automatic summer/winter changeover). When this mode is activated, a black line is displayed under the symbol.
-  **Reduced mode.** This mode operates the appliance, up to the temperature setpoint defined for the reduced operation and maintains it continuously (no scheduler). It also allows the anti-frost and overheating protections to be active. When the mode is activated, a black line is displayed under the symbol.
-  **Protection mode.** In this mode, the heating system is disabled, but the anti-frost and overheating protections remain active.



Information. Pressing on this button displays the following information (not exhaustive):

- › Error (with code and explanation - Refer to **“Error Codes” on page 49**)
- › Maintenance (with code and explanation - Refer to the appliance manual for more information)
- › Boiler temp
- › Boiler setpoint / Boiler return temp
- › Boiler return temp
- › Outside temp
- › Outside temp min / Reset ?
- › Outside temp max / Reset ?
- › DHW consumption temp
- › State heating circuit
- › State DHW
- › State boiler
- › Date
- › Telephone customer service
- › Water pressure
- › SW diagnostic code



Chimney sweep. Depressing this button for < 3 sec. opens the **burner output** function. Rotating the selection knob allows to increase/decrease the burner output and perform flue gas contents analysis.












Manual mode.



Reset (Unlock). Some errors result in a lock of the controller and can only be reset through this button. Refer to **“Performing Reset after a Locking Error” on page 9** for more information.

CONTROLLER OPERATION

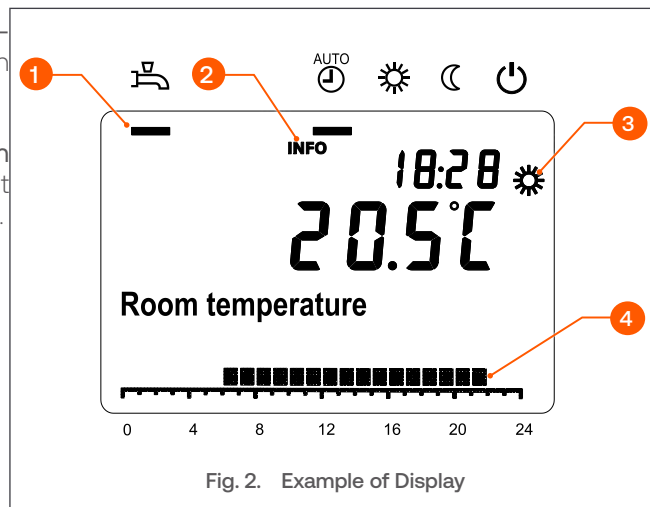
The following symbols are displayed **on the screen (See Fig. 2):**

-  **Comfort mode active (3).** The time scale (4) at the bottom of the display indicates the period during which this mode is active (in the screen below, the automatic mode, with scheduler is active).
-  **Reduced mode active.**
-  **Frost protection active.** The appliance will heat up to the frost-protection setpoint.
-  **Process in progress.**
-  **Holiday function active.**
-  **Reference to heating circuits.**
-  **The burner is in operation.**
-  **Maintenance message.**
-  **Fault message** - An error has occurred and a fault code and text can be displayed on the screen by pushing on the Info button.

INFO Information level active (2)

PROG Setting level active - the parameters can be changed.

ECO Heating system switched off, but ECO function active.



Boiler Settings for the Installer

Access Levels (See Fig. 3)

Three different levels of settings are available for the Installer : End user, Commissioning and Engineer levels. A fourth level, OEM, is only accessible at factory level, through the use of a restricted code.



Depending on the year of built, some small differences can occur, and in the most recent versions:

- ▷ **a code is necessary to access the Engineer level menus. Please contact your AIC representative for more information.**
- ▷ **some menu names are slightly different, but have the same function**

Each level allows to set certain specific parameters or program the boiler, according to the installed circuits.

To access the Commissioning and the Engineer levels, proceed as follows:

1. Press on the **OK (2)** button
2. Press on the **Info (1)** for more than 3 seconds. The access levels are displayed.
3. Rotate the selection knob (3) to select the required level.
4. Press on the **OK (2)** button to validate the selection.
5. Enter the access code, as required :
 - ▷ Rotate the selection knob (3) to the required number
 - ▷ Press the **OK (2)** button to validate and move to the next position.

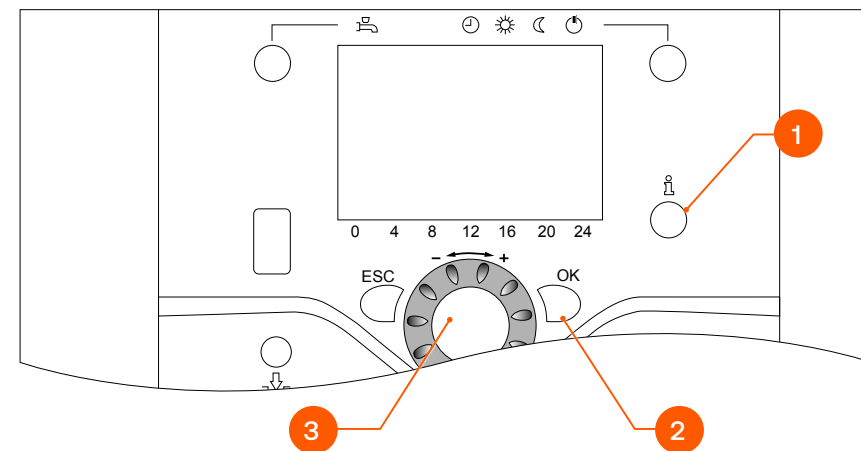


Fig. 3. Using the controls

CONTROLLER OPERATION

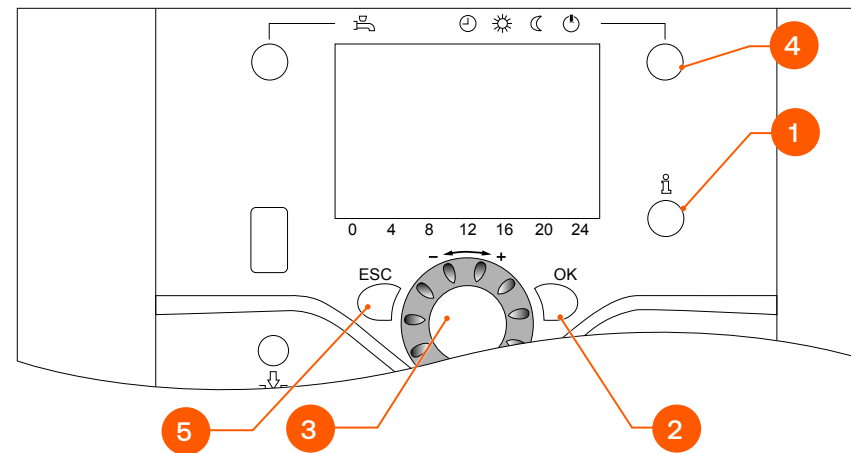
Quick access to functions for the Installer

Setting to Low/High Fire

1. Access the **Commissioning** or **Engineer** level (see “**Access Levels (See Fig. 3)**” on page 6).
2. Depress the **Heating mode selection** button (4) for more than 3 seconds to access the **Controller stop function**.
3. Press the **Information** button (1) to display the modulation indicator (in %).
4. Depress the **OK** button (2), the indicator starts flashing.
5. Rotate the selection knob (3) to the right to increase to 100% (high fire) or to the left, to decrease to 0% (low fire). Press the **OK** button (2) to confirm.
6. Depress the **ESC** button (5) to exit each function and menu and get back to the home screen.

Reading the Ionization current and fan speed

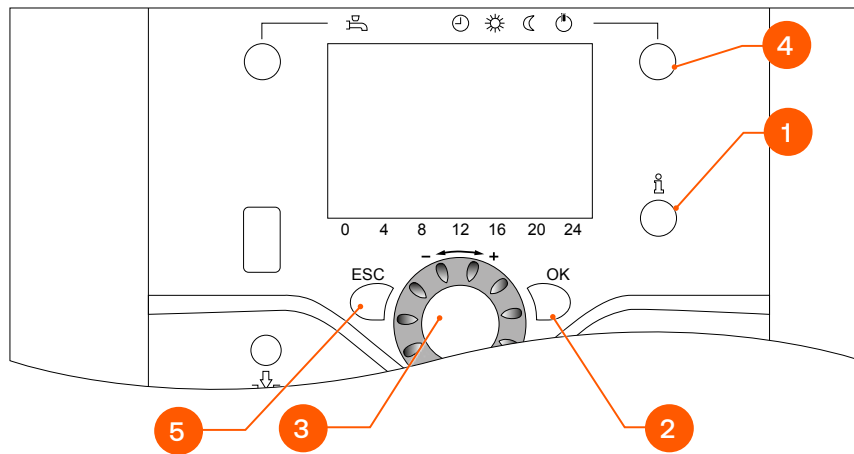
1. Access the **Commissioning** or **Engineer** level (see “**Access Levels (See Fig. 3)**” on page 6).
2. Depress the **OK** button (2) to access the menus.
3. Rotate the selection knob (3) to reach the **Diagnostics heat operation** function. Press the **OK** button (2) to confirm.
4. Rotate the selection knob (3) to reach program line:
 - ▶ 8323 (fan speed)
 - ▶ 8329 (ionization current)
5. Depress the **ESC** button (5) to exit each function and menu and get back to the home screen.



CONTROLLER OPERATION

Reading the Error History

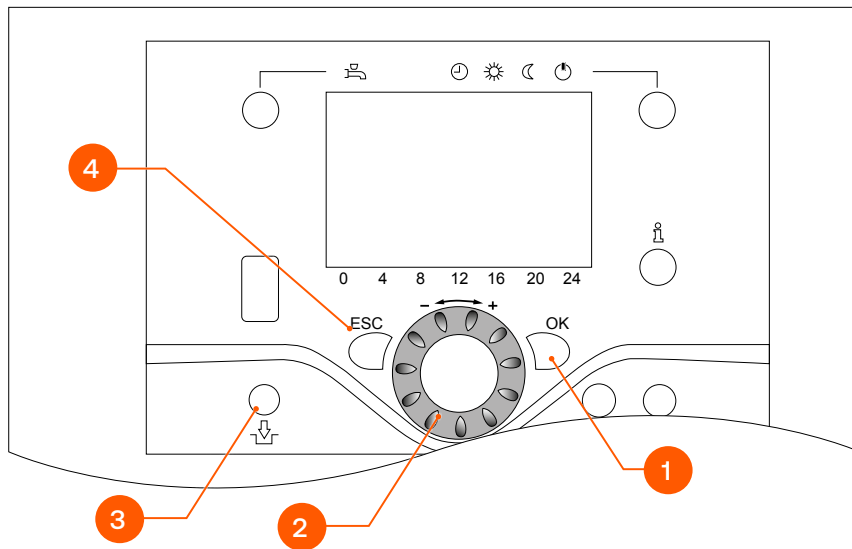
1. Access the **Commissioning** or **Engineer** level (see **“Access Levels (See Fig. 3)” on page 6**).
2. Depress the **OK** button (2) to access the menus.
3. Rotate the selection knob (3) to reach the **Fault** function. Press the **OK** button (2) to confirm.
4. Rotate the selection knob (4) to reach program line:
 - ▶ **6800 (History 1) --> 6990 (History 20)**. Refer to the appliance manual for an explanation of the error code, if any.
5. Depress the **ESC** button (5) to exit each function and menu and get back to the home screen.



CONTROLLER OPERATION

Performing Reset after an Interactive Error

1. When an interactive error occurs and the source of the error is corrected, “**Reset? Yes**” is displayed.
2. Depress the **OK** button (1) to validate, “**Yes**” starts flashing.
3. If “**No**” is displayed, rotate the selection knob (2) to display “**Yes**”.
4. Depress the **OK** button (1) to confirm.
5. Depress the **ESC** button (4) to exit each function and menu and get back to the home screen.



Performing Reset after a Locking Error

A locking error:

- ▶ remains saved even if the power supply (mains) is off.
 - ▶ requires unlocking even after the fault has been solved.
 - ▶ If error still persists, remove first the error.
1. Depress the Unlock button (3).
 2. The message “**Event Reset**” appears on the screen.
 3. Depress the **OK** button (1) to confirm.
 4. The error is displayed, with “**Reset? Yes**”.
 5. Depress the **OK** button (1) to validate, “**Yes**” starts flashing.
 6. If “**No**” is displayed, rotate the selection knob (2) to display “**Yes**”.
 7. Depress the **OK** button (1) to confirm.
 8. Depress the **ESC** button (4) to exit each function and menu and get back to the home screen.
 9. If the problem is still present, call your AIC representative.

CONTROLLER OPERATION

Resetting to Factory Defaults



If necessary for later reference and before resetting to factory defaults, make sure to write down the existing settings.

All resettable parameters can be reset to their default values, i.e. the values uploaded in the controller in factory. The list of factory settings is indicated in the table on next page.



Some menus and function are not resettable:

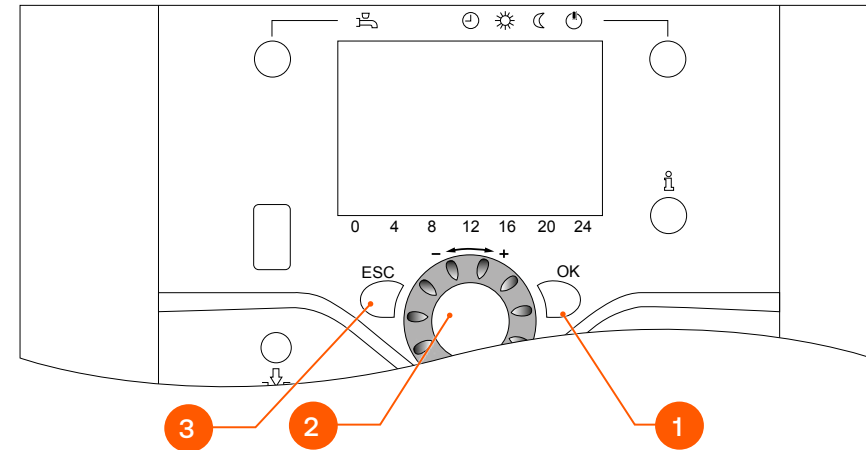
- ▷ Time of day and date
- ▷ Operator section
- ▷ Wireless and all Time programs
- ▷ Setpoint – Manual control

1. Access the **Commissioning** or **Engineer** level (see **“Access Levels (See Fig. 3)”** on page 6).
2. Depress the **OK** button (1) to access the menus.
3. Rotate the selection knob (2) to reach the **Configuration** menu. Press the **OK** button (1) to confirm.
4. Rotate the selection knob (2) to reach program line:
 - ▷ **6205 Reset to default parameters**
5. Depress the **OK** button (1). “No” starts flashing. Rotate the selection knob to change “No” into “Yes” and depress the **OK** button (1) to confirm.
6. Once the value is set to “Yes”, wait until it changes back automatically to “No”. This may take more than 30 seconds.



Make sure to wait for the value to turn back to “No”, or the appliance will not be reset to factory settings.

7. Turn off the appliance using the appliance on/off button, then restart. The appliance will restart with the factory defaults.
8. Refer to the appliance manual for more information on startup and commissioning procedures.
9. Depress the **ESC** button (3) to exit each function and menu and get back to the home screen.



CONTROLLER OPERATION

Menus and Settings

The table contains the menus and sub-menus for the installer (End user, Commissioning and Engineer levels), and the program number.



- ▷ *Certain functions will only be displayed according to the heating system configuration and the installed modules.*
- ▷ *In case of doubt regarding the required setting or the default value of a parameter, please contact your AIC representative.*

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Time of day and date	1	▶ Hours / Minutes			01:00 (hh:min)	
	2	▶ Day / Month			01.01 (dd.mm)	
	3	▶ Year			2030 (yyyy)	
	5	▶ Start of summertime			25.03 (dd.mm)	
	6	▶ End of summertime			25.10 (dd.mm)	
	Operator section	20	▶ Language	<ul style="list-style-type: none"> ▷ Deutsch, English, Français, Italiano, Nederlands, Español, Dansk, Suomi, Svenska, Portuguese ▷ English, Českí, Slovenský, Polski, Türkçe, Magyar, русский, Slovenščina, Ελληνικά, Serbian, (Italiano, Español) 	English	English
				—	—	English
22		▶ Info	<ul style="list-style-type: none"> ▷ Temporarily ▷ Permanently 		Temporarily	
26		▶ Operation lock	<ul style="list-style-type: none"> ▷ Off ▷ On 		Off	
27		▶ Programming lock	<ul style="list-style-type: none"> ▷ Off ▷ On 		Off	
28		▶ Direct Adjustment	<ul style="list-style-type: none"> ▷ Automatic storage ▷ Storage with confirmation 		Storage with confirmation	
29		▶ Units	<ul style="list-style-type: none"> ▷ °C, bar ▷ °F, PSI 		°C, bar	
44		▶ Operation HC2	<ul style="list-style-type: none"> ▷ Jointly with HC1 ▷ Independently 		Jointly with HC1	
46		▶ Operation HC3/P	<ul style="list-style-type: none"> ▷ Jointly with HC1 ▷ Independently 		Jointly with HC1	
70		▶ Software version				

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Time Prog heating circuit 1	500	▶ Select Mo-Su	▷ Mo-Su, Mo-Fr, Sa-Su, Mo, Tu, We, Th, Fr, Sa, Su		Mo	
	501	▶ (selection) 1st phase on			6:00 (h/min)	
	502	▶ (selection) 1st phase off			22:00 (h/min)	
	503	▶ (selection) 2nd phase on			--:-- (h/min)	
	504	▶ (selection) 2nd phase off			--:-- (h/min)	
	505	▶ (selection) 3rd phase on			--:-- (h/min)	
	506	▶ (selection) 3rd phase off			--:-- (h/min)	
	516	▶ Default values	▷ No ▷ Yes		No	
Time Program 5	600	▶ Select Mo-Su	▷ Mo-Su, Mo-Fr, Sa-Su, Mo, Tu, We, Th, Fr, Sa, Su		Mo	
	601	▶ (selection) 1st phase on			6:00 (h/min)	
	602	▶ (selection) 1st phase off			22:00 (h/min)	
	603	▶ (selection) 2nd phase on			--:-- (h/min)	
	604	▶ (selection) 2nd phase off			--:-- (h/min)	
	605	▶ (selection) 3rd phase on			--:-- (h/min)	
	606	▶ (selection) 3rd phase off			--:-- (h/min)	
	616	▶ Default values	▷ No ▷ Yes		No	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Holidays heating circuit 1	641	▶ Preselection	▷ Period 1 to 8	Period 1		
	642	▶ Period (selection): Start		--:-- (dd:mm)		
	643	▶ Period (selection):End		--:-- (dd:mm)		
	648	▶ Operating level	▷ Frost protection ▷ Reduced	Frost protection		
Heating circuit 1	710	▶ Comfort Setpoint		20.0°C		
	712	▶ Reduced setpoint		16.0°C		
	714	▶ Frost protection setpoint		10.0°C		
	716	▶ Comfort setpoint max		35.0°C		
	720	▶ Heating curve slope		1.5		
	721	▶ Heating curve displacement		0.0°C		
	726	▶ Heating curve adaptation	▷ Off ▷ On	Off		
	730	▶ Summer/winter heating limit		18.0°C		
	732	▶ 24-hour heating limit		-3°C		
	733	▶ Ext'n 24-hour heating limit	▷ No ▷ Yes	Yes		
	740	▶ Flow temp setpoint min		8°C		
	741	▶ Flow temp setpoint max		90°C	80°C	
	742	▶ Flow temp setpoint room stat		50°C	65°C	
	744	▶ Swi-on ratio room stat		%	50%	
	746	▶ Delay heat request		0 s		
	750	▶ Room influence		%	20%	
	760	▶ Room temp limitation		1°C		
	770	▶ Boost heating		5°C		
	780	▶ Quick setback	▷ Off ▷ To Reduced setpoint ▷ To frost Prot setpoint	To Reduced setpoint		

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Heating circuit 1 (Cnt'd)	790	▶ Optimum start control max			0 min	
	791	▶ Optimum stop control max			0 min	
	800	▶ Reduced setp increase start			°C	-5°C
	801	▶ Reduced setp increase end				-15°C
	809	▶ Continuous pump operation	▷ No ▷ Yes			No
	820	▶ Overtemp prot pump circuit	▷ Off ▷ On			On
	830	▶ Mixing valve boost				5°C
	832	▶ Actuator type	▷ 2 position ▷ 3 position			3 position
	833	▶ Switching differential 2-pos				2°C
	834	▶ Actuator running time				120 s
	835	▶ Mixing valve Xp				32°C
	836	▶ Mixing valve Tn				120s
	850	▶ Floor curing function	▷ Off ▷ Functional heating ▷ Curing heating ▷ Functional/Curing heating ▷ Curing/Functional heating ▷ Manually			Off
	851	▶ Floor curing setp manually			°C	25°C
	855	▶ Floor curing setp current ▶ Floor curing day current			°C day	—
	861	▶ Excess heat draw	▷ Off ▷ Heating mode ▷ Always			Always
	870	▶ With buffer	▷ No ▷ Yes		No	Yes
	872	▶ With prim contr/system pump	▷ No ▷ Yes			Yes
	880	▶ Pump speed reduction	▷ Operating level ▷ Characteristic ▷ Temp differential nominal			Characteristic

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default			
				Nesta	Nesta Plus	Nesta Chrome	
Heating circuit 1 (Cnt'd)	881	▶ Starting speed			100%		
	882	▶ Pump speed min			50%		
	883	▶ Pump speed max			100%		
	888	▶ Curve readj. at 50% speed			33%		
	889	▶ Filter time const speed ctrl			5 min		
	890	▶ Flow setp readj speed ctrl	▷ No ▷ Yes		Yes		
	898	▶ Operating level changeover	▷ Frost protection ▷ Reduced ▷ Comfort		Reduced		
	900	▶ Optg mode changeover	▷ None ▷ Protection ▷ Reduced ▷ Comfort ▷ Automatic		Protection		
	Boiler	2203	▶ Release below outside temp		°C		0°C
		2208	▶ Full charging buffer	▷ Off ▷ On		Off	
2210		▶ Setpoint min		20°C		40°C	
2212		▶ Setpoint max		90°C		85	
2214		▶ Setpoint manual control			60°C		
2217		▶ Setpoint frost protection			5°C		
2241		▶ Burner running time min		1 min		3 min	
2243		▶ Burner off time min			3 min		
2245		▶ SD burner off time		20°C		15°C	
2250		▶ Pump overrun time		2 min		5 min	
2253		▶ Pump overr time after DHW		5 min		3 min	
2270		▶ Return setpoint min			8°C		
2301		▶ Boiler pump on heat gen lock	▷ Off ▷ On		Off		
2305		▶ Impact heat generation lock	▷ Heating mode only ▷ Heating and DHW mode		Heating and DHW mode		

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Boiler (cont'd)	2316	▶ Temp differential max			20°C	
	2317	▶ Temp differential nominal			20°C	
	2320	▶ Pump modulation	<ul style="list-style-type: none"> ▷ None ▷ Demand ▷ Boiler setpoint ▷ Temp differential nominal ▷ Burner output 		None	
	2321	▶ Starting speed			100%	
	2322	▶ Pump speed min			10%	40%
	2323	▶ Pump speed max				100%
	2330	▶ Output nominal				kW
	2331	▶ Output basic stage				kW
	2334	▶ Output at pump speed min				0%
	2335	▶ Output at pump speed max				100%
	2441	▶ Fan speed heating max				rpm
	2442	▶ Fan speed full charging max				rpm
	2444	▶ Fan speed DHW max				rpm
	2445	▶ Fan shutdown heating mode	<ul style="list-style-type: none"> ▷ Off ▷ On 			Off
	2446	▶ Fan shutdown delay				3 s
	2450	▶ Controller delay	<ul style="list-style-type: none"> ▷ Off ▷ Heating mode only ▷ DHW mode only ▷ Heating and DHW mode 		Heating mode only	Heating and DHW mode
	2452	▶ Controller delay speed				2 s
2453	▶ Controller delay duration				60 s	
2454	▶ Switching diff on HCs				4°C	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default			
				Nesta	Nesta Plus	Nesta Chrome	
Boiler (cont'd)	2455	▶ Switching diff off min HCs		5°C		2°C	
	2456	▶ Switching diff off max HCs			5°C		
	2457	▶ Setting time HCs			10 min		
	2460	▶ Switching diff on DHW		6°C		4°C	
	2461	▶ Switching diff off min DHW		6°C		2°C	
	2462	▶ Switching diff off max DHW		8°C		5°C	
	2463	▶ Setting time DHW			10 min		
	2470	▶ Delay heat req special op			0 s		
	2473	▶ Flue gas temp output red		95°C	103°C	100°C	
	2474	▶ Flue gas temp swi-off limit		97°C	108°C	110°C	
	2550	▶ Gas energy metering	▷ Off ▷ On			On	
	2551	▶ Gas energy metering readj				1	
	2560	▶ Off delay flue gas damper				30 s	
	2630	▶ Auto deaeration procedure	▷ Off ▷ On			Off	
	General Functions	5570	▶ Temp diff on dT contr 1				20
		5571	▶ Temp diff off dT contr 1				10
5572		▶ On temp min dT contr 1				0	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
General Functions (Cont'd)	5573	▶ Sensor 1 dT controller 1	<ul style="list-style-type: none"> ▷ None ▷ DHW sensor B31 ▷ Collector sensor B6 ▷ Return sensor B7 ▷ DHW circulation sensor B39 ▷ Buffer sensor B4 ▷ Buffer sensor B41 ▷ Flue gas temp sensor B8 ▷ Common flow sensor B10 ▷ Solid fuel boiler sensor B22 ▷ DHW charging sensor B36 ▷ Buffer sensor B42 ▷ Common return sensor B73 ▷ Cascade return sensor B70 ▷ Swimming pool sensor B13 ▷ Solar flow sensor B63 ▷ Solar return sensor B64 ▷ DHW outlet sensor B38 ▷ Primary exch sensor B26 ▷ Boiler sensor B2 ▷ Solar sensor ext exch B62 ▷ DHW sensor B3 ▷ Outside sensor B9 ▷ Primary contr sensor B15 ▷ Room sensor B5 ▷ Room sensor B52 ▷ Room sensor B53 ▷ Flow sensor HC1 B1 ▷ Flow sensor HC2 B12 ▷ Flow sensor HC3 B14 		None	
	5574	▶ Sensor 2 dT controller 1	Same as Pgm Nb 5573		None	
	5575	▶ On time min dT contr 1			0 s	
	5577	▶ Pump/valve kick K21	<ul style="list-style-type: none"> ▷ Off ▷ On 		On	
	5580	▶ Temp diff on dT contr 2			20°C	
	5581	▶ Temp diff off dT contr 2			10°C	
	5582	▶ On temp min dT contr 2			0°C	
	5583	▶ Sensor 1 dT controller 2	Same as Pgm Nb 5573		None	
	5584	▶ Sensor 2 dT controller 2	Same as Pgm Nb 5573		None	
	5585	▶ On Time Min dT contr 2			0°C	
	5587	▶ Pump/valve kick K22	<ul style="list-style-type: none"> ▷ Off ▷ On 		On	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration	5710	▶ Heating circuit 1	▷ Off ▷ On		On	Off
	5711	▶ Cooling circuit 1	▷ Off ▷ 4-pipe system cooling		Off	
	5715	▶ Heating Circuit 2	▷ Off ▷ On		Off	
	5721	▶ Heating Circuit 3	▷ Off ▷ On		Off	
	5730	▶ DHW sensor	▷ DHW sensor B3 ▷ Thermostat ▷ DHW outlet sensor B38		DHW sensor B3	
	5731	▶ DHW controlling element	▷ No charging request ▷ Charging pump ▷ Diverting valve		No charging request	Charging pump
	5732	▶ Pump off change div valve			0 s	
	5733	▶ Delay pump off			0 s	
	5734	▶ Basic position DHW div valve	▷ Last request ▷ Heating Circuit ▷ DHW		Last request	
	5736	▶ DHW separate circuit	▷ Off ▷ On		Off	
	5737	▶ Optg action DHW div valve	▷ Position on DHW ▷ Position on heating circuit		Position on DHW	
	5738	▶ Midposition DHW div valve	▷ Off ▷ On		Off	
	5774	▶ Ctrl boiler pump/DHW valve	▷ All requests ▷ Request HC1/DHW only		All requests	
	5775	▶ Boiler pump with DHW	▷ Off ▷ On		On	
	5840	▶ Solar controlling element	▷ Charging pump ▷ Diverting valve		Charging pump	
	5841	▶ External solar exchanger	▷ Jointly ▷ DHW storage tank ▷ Buffer storage tank		Jointly	
	5870	▶ Combi storage tank	▷ No ▷ Yes		No	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (Cnt'd)	5890	▶ Relay output QX1	<ul style="list-style-type: none"> ▷ None ▷ Circulating pump Q4 ▷ El imm heater DHW K6 ▷ Collector pump Q5 ▷ Cons circuit pump VK1 Q15 ▷ Boiler pump Q1 ▷ Bypass pump Q12 ▷ Alarm output K10 ▷ 2nd pump speed HC1 Q21 ▷ 2nd pump speed HC2 Q22 ▷ 2nd pump speed HC3 Q23 ▷ Heat circuit pump HC3 Q20 ▷ Cons circuit pump VK2 Q18 ▷ System pump Q14 ▷ Heat gen shutoff valve Y4 ▷ Solid fuel boiler pump Q10 ▷ Time setting 5 K13 ▷ Buffer return valve Y15 ▷ Solar pump ext exch K9 ▷ Solar ctrl elem buffer K8 ▷ Solar ctrl elem swi pool K18 ▷ Swimming pool pump Q19 ▷ Cascade pump Q25 ▷ St tank transfer pump Q11 ▷ DHW mixing pump Q35 ▷ DHW interm circ pump Q33 ▷ Heat request K27 ▷ Refrigeration request K28 ▷ Heat circuit pump HC1 Q2 ▷ Heat circuit pump HC2 Q6 ▷ DHW ctrl elem Q3 ▷ Instant HW ctrl element Q34 ▷ Water refill K34 ▷ 2nd boiler pump speed Q27 ▷ Status output K35 ▷ Status information K36 ▷ Flue gas damper K37 ▷ Fan shutdown K38 ▷ dT controller 1 K21 ▷ dT controller 2 K22 	Boiler pump Q1		
	5891	▶ Relay output QX2	Same as Pgm Nb 5890	None		Heat circuit pump HC1 Q2
	5892	▶ Relay output QX3	Same as Pgm Nb 5890	None		DHW ctrl elem Q3

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (Cnt'd)	5894	▶ Relay output QX4	<ul style="list-style-type: none"> ▷ None ▷ Heat gen shutoff valve Y4 ▷ Buffer return valve Y15 ▷ Solar ctrl elem buffer K8 ▷ Solar ctrl elem swi pool K18 ▷ DHW ctrl lem Q3 ▷ Instant WH ctrl elem Q34 	None		
	5930	▶ Sensor input BX1	<ul style="list-style-type: none"> ▷ None ▷ DHW sensor B31 ▷ Collector sensor B6 ▷ DHW circulation sensor B39 ▷ Buffer sensor B4 ▷ Buffer sensor B41 ▷ Flue gas temp sensor B8 ▷ Common flow sensor B10 ▷ Solid fuel boiler sensor B22 ▷ DHW charging sensor B36 ▷ Buffer sensor B42 ▷ Common return sensor B73 ▷ Cascade return sensor B70 ▷ Swimming pool sensor B13 ▷ Solar flow sensor B63 ▷ Solar return sensor B64 ▷ Primary exch sensor B26 	None	Common flow sensor B10	
	5931	▶ Sensor input BX2	Same as Pgm Nb 5930	None		
	5932	▶ Sensor input BX3	Same as Pgm Nb 5930	Flue gas temp sensor B8		

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	5950	▶ Function input H1	▷ None			
			▷ Optg mode change HCs+ DHW			
			▷ Optg mode changeover DHW			
			▷ Optg mode changeover HCs			
			▷ Optg mode changeover HC1			
			▷ Optg mode changeover HC2			
			▷ Optg mode changeover HC3			
			▷ Heat generation lock			
			▷ Error/alarm message			
			▷ Consumer request VK1			
			▷ Consumer request VK2			
			▷ Release swi pool source htg			
			▷ Excess heat discharge			
			▷ Release swi pool solar			
▷ Operating level DHW						
▷ Operating level HC1			None			
▷ Operating level HC2						
▷ Operating level HC3						
▷ Room thermostat HC1						
▷ Room thermostat HC2						
▷ Room thermostat HC3						
▷ DHW flow switch						
▷ DHW thermostat						
▷ Pulse count						
▷ Checkb sign flue gas damper						
▷ Start prevention						
▷ Boiler flow switch						
▷ Boiler pressure switch						
▷ Consumer request VK1 10V						
▷ Consumer request VK2 10V						
▷ Pressure measurement 10V						
▷ Output request 10V						
	5951	▶ Contact type H1	▷ NC ▷ NO	Normally open (NO)	Normally closed (NC)	Normally open (NO)
	5953	▶ Voltage value 1 H1		0V		0,5V
	5954	▶ Function value 1 H1			0	
	5955	▶ Voltage value 2 H1		0V		4,3V
	5956	▶ Function value 2 H1			0	60
	5960	▶ Function input H3	<i>Same as Pgm Nb 5950</i>			Pressure measurement 10V
	5961	▶ Contact type H3	▷ NC ▷ NO			NO
	5963	▶ Voltage value 1 H3				0

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	5964	▶ Function value 1 H3			0	
	5965	▶ Voltage value 2 H3		10V		0V
	5966	▶ Function value 2 H3			60	
	5970	▶ Function input H4	<ul style="list-style-type: none"> ▷ None ▷ Optg mode change HCs+ DHW ▷ Optg mode changeover DHW ▷ Optg mode changeover HCs ▷ Optg mode changeover HC1 ▷ Optg mode changeover HC2 ▷ Optg mode changeover HC3 ▷ Heat generation lock ▷ Error/alarm message ▷ Consumer request VK1 ▷ Consumer request VK2 ▷ Release swi pool source htg ▷ Excess heat discharge ▷ Release swi pool solar ▷ Operating level DHW ▷ Operating level HC1 ▷ Operating level HC2 ▷ Operating level HC3 ▷ Room thermostat HC1 ▷ Room thermostat HC2 ▷ Room thermostat HC3 ▷ DHW flow switch ▷ DHW thermostat ▷ Pulse count ▷ Checkb sign flue gas damper ▷ Start prevention ▷ Boiler flow switch ▷ Boiler pressure switch ▷ Flow measurement Hz 		Start prevention	
	5971	▶ Contact type H4	<ul style="list-style-type: none"> ▷ NC ▷ NO 		NC	
	5973	▶ Frequency value 1 H4			0	
	5974	▶ Function value 1 H4			0	
	5975	▶ Frequency value 2 H4			0	
	5976	▶ Function value 2 H4			0	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (Cnt'd)	5977	▶ Function input H5	<ul style="list-style-type: none"> ▷ None ▷ Optg mode change HCs+ DHW ▷ Optg mode changeover DHW ▷ Optg mode changeover HCs ▷ Optg mode changeover HC1 ▷ Optg mode changeover HC2 ▷ Optg mode changeover HC3 ▷ Heat generation lock ▷ Error/alarm message ▷ Consumer request VK1 ▷ Consumer request VK2 ▷ Release swi pool source htg ▷ Excess heat discharge ▷ Release swi pool solar ▷ Operating level DHW ▷ Operating level HC1 ▷ Operating level HC2 ▷ Operating level HC3 ▷ Room thermostat HC1 ▷ Room thermostat HC2 ▷ Room thermostat HC3 ▷ DHW flow switch ▷ DHW thermostat ▷ Pulse count ▷ Checkb sign flue gas damper ▷ Start prevention ▷ Boiler flow switch ▷ Boiler pressure switch 		None	Room thermostat HC1
	5978	▶ Contact type H5	<ul style="list-style-type: none"> ▷ NC ▷ NO 		NC	NO

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	6008	▶ Function Input H6	<ul style="list-style-type: none"> ▷ None ▷ Optg mode change HCs+ DHW ▷ Optg mode changeover DHW ▷ Optg mode changeover HCs ▷ Optg mode changeover HC1 ▷ Optg mode changeover HC2 ▷ Optg mode changeover HC3 ▷ Heat generation lock ▷ Error/alarm message ▷ Consumer request VK1 ▷ Consumer request VK2 ▷ Release swi pool source htg ▷ Excess heat discharge ▷ Release swi pool solar ▷ Operating level DHW ▷ Operating level HC1 ▷ Operating level HC2 ▷ Operating level HC3 ▷ Room thermostat HC1 ▷ Room thermostat HC2 ▷ Room thermostat HC3 ▷ DHW flow switch ▷ DHW thermostat ▷ Pulse count ▷ Checkb sign flue gas damper ▷ Start prevention ▷ Boiler flow switch ▷ Boiler pressure switch ▷ Gas pressure switch 		None	
			6009			

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (Cnt'd)	6011	▶ H7 function selection	▷ None			
			▷ Optg mode change HCs+ DHW			
			▷ Optg mode changeover DHW			
			▷ Optg mode changeover HCs			
			▷ Optg mode changeover HC1			
			▷ Optg mode changeover HC2			
			▷ Optg mode changeover HC3			
			▷ Heat generation lock			
			▷ Error/alarm message			
			▷ Consumer request VK1			
▷ Consumer request VK2						
▷ Release swi pool source htg						
▷ Excess heat discharge						
▷ Release swi pool solar						
▷ Operating level DHW						
▷ Operating level HC1						
▷ Operating level HC2						
▷ Operating level HC3						
▷ Room thermostat HC1						
▷ Room thermostat HC2						
▷ Room thermostat HC3						
▷ DHW flow switch						
▷ DHW thermostat						
▷ Pulse count						
▷ Checkb sign flue gas damper						
▷ Start prevention						
▷ Boiler flow switch						
▷ Boiler pressure switch						
6012	▶ Contact type H7	▷ NC ▷ NO				NO
6020	▶ Fctn Exten Module 1	▷ None ▷ Multifunctional ▷ Heating circuit 1 ▷ Heating circuit 2 ▷ Heating circuit 3 ▷ Return temp controller ▷ Solar DHW ▷ Primary contr/system pump		None	Multifunctional	None
6021	▶ Function extension module 2	Same as Pgm Nb 6020				None
6022	▶ Function extension module 3	Same as Pgm Nb 6020				None
6024	▶ Funct input EX21 Mod 1	▷ None ▷ Limit thermostat HC				None
6026	▶ Funct input EX21 Mod 2	Same as Pgm Nb 6024				None

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (Cnt'd)	6028	▶ Funct input EX21 module 3	Same as Pgm Nb 6024		None	
	6030	▶ Relay output QX21 module 1	<ul style="list-style-type: none"> ▷ None ▷ Circulating pump Q4 ▷ El imm heater DHW K6 ▷ Collector pump Q5 ▷ Cons circuit pump VK1 Q15 ▷ Boiler pump Q1 ▷ Bypass pump Q12 ▷ Alarm output K10 ▷ 2nd pump speed HC1 Q21 ▷ 2nd pump speed HC2 Q22 ▷ 2nd pump speed HC3 Q23 ▷ Heat circuit pump HC3 Q20 ▷ Cons circuit pump VK2 Q18 ▷ System pump Q14 ▷ Heat gen shutoff valve Y4 ▷ Solid fuel boiler pump Q10 ▷ Time program 5 K13 ▷ Buffer return valve Y15 ▷ Solar pump ext exch K9 ▷ Solar ctrl elem buffer K8 ▷ Solar ctrl elem swi pool K18 ▷ Swimming pool pump Q19 ▷ Cascade pump Q25 ▷ St tank transfer pump Q11 ▷ DHW mixing pump Q35 ▷ DHW interm circ pump Q33 ▷ Heat request K27 ▷ Refrigeration request K28 ▷ Heat circuit pump HC1 Q2 ▷ Heat circuit pump HC2 Q6 ▷ DHW ctrl elem Q3 ▷ Instant heater ctrl elem Q34 ▷ Water filling K34 ▷ 2nd boiler pump speed Q27 ▷ Status output K35 ▷ Status information K36 ▷ Fan shutdown K38 ▷ dT controller 1 K21 ▷ dT controller 2 K22 		None	
	6031	▶ Relay output QX22 module 1	Same as Pgm Nb 6030		None	
	6032	▶ Relay output QX23 module 1	Same as Pgm Nb 6030		None	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	6033	▶ Relay output QX21 module 2	Same as Pgm Nb 6030	None		
	6034	▶ Relay output QX22 module 2	Same as Pgm Nb 6030	None		
	6035	▶ Relay output QX23 module 2	Same as Pgm Nb 6030	None		
	6036	▶ Relay output QX21 module 3	Same as Pgm Nb 6030	None		
	6037	▶ Relay output QX22 module 3	Same as Pgm Nb 6030	None		
	6038	▶ Relay output QX23 module 3	Same as Pgm Nb 6030	None		
	6040	▶ Sensor input BX21 module 1	<ul style="list-style-type: none"> ▷ None ▷ DHW sensor B31 ▷ Collector sensor B6 ▷ DHW circulating sensor B39 ▷ Buffer sensor B4 ▷ Buffer sensor B41 ▷ Flue gas temp sensor B8 ▷ Segment flow sensor B10 ▷ Solid fuel boiler sensor B22 ▷ DHW charging sensor B36 ▷ Buffer sensor B42 ▷ Segment return sensor B73 ▷ Cascade return sensor B70 ▷ Pool sensor B13 ▷ Solar flow sensor B63 ▷ Solar return sensor B64 ▷ Primary exch sensor B26 ▷ Special temp sensor 1 ▷ Special temp sensor 2 ▷ 	None		
	6041	▶ Sensor input BX22 module 1	Same as Pgm Nb 6040	None		
	6042	▶ Sensor input BX21 module 2	Same as Pgm Nb 6040	None		
	6043	▶ Sensor input BX22 module 2	Same as Pgm Nb 6040	None		
	6044	▶ Sensor input BX21 module 3	Same as Pgm Nb 6040	None		

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	6045	▶ Sensor input BX22 module 3			None	
	6046	▶ Funct input H2/H21 modul 1	<ul style="list-style-type: none"> ▷ None ▷ Optg mode change HCs+DHW ▷ Optg mode changeover DHW ▷ Optg mode changeover HCs ▷ Optg mode changeover HC1 ▷ Optg mode changeover HC2 ▷ Optg mode changeover HC3 ▷ Heat generation lock ▷ Error/alarm message ▷ Consumer request VK1 ▷ Consumer request VK2 ▷ Release swi pool source heat ▷ Excess heat discharge ▷ Release swi pool solar ▷ Operating level DHW ▷ Operating level HC1 ▷ Operating level HC2 ▷ Operating level HC3 ▷ Room thermostat HC1 ▷ Room thermostat HC2 ▷ Room thermostat HC3 ▷ DHW flow switch ▷ DHW thermostat ▷ Limit thermostat HC ▷ Start prevention ▷ Boiler flow switch ▷ Boiler pressure switch ▷ Consumer request VK1 10V ▷ Consumer request VK2 10V ▷ Pressure measurement 10V ▷ Output request 10V 	None	Boiler flow switch	None
	6047	▶ Cont type H2/H21 modul 1	<ul style="list-style-type: none"> ▷ NC ▷ NO 	NO	NC	NO
	6049	▶ Volt val 1 H2/H21 modul 1			0V	
	6050	▶ Funct val 1 H2/H21 modul 1			0	
	6051	▶ Volt val 2 H2/H21 modul 1			0V	
	6052	▶ Funct val 2 H2/H21 modul 1			0	
	6054	▶ Funct input H2/H21 modul 2	Same as Pgm Nb 6046		None	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default			
				Nesta	Nesta Plus	Nesta Chrome	
Configuration (cont'd)	6055	▶ Cont type H2/H21 modul 2	▷ NC ▷ NO		NO		
	6057	▶ Volt val 1 H2/H21 modul 2			0V		
	6058	▶ Funct val 1 H2/H21 modul 2			0		
	6059	▶ Volt val 2 H2/H21 modul 2			0V		
	6060	▶ Funct val 2 H2/H21 modul 2			0		
	6062	▶ Funct input H2/H21 modul 3	<i>Same as Pgm Nb 6046</i>			None	
	6063	▶ Cont type H2/H21 modul 3	▷ NC ▷ NO			NO	
	6065	▶ Volt val 1 H2/H21 modul 3				0V	
	6066	▶ Funct val 1 H2/H21 modul 3				0	
	6067	▶ Volt val 2 H2/H21 modul 3				0V	
	6068	▶ Funct val 2 H2/H21 modul 3				0	
	6072	▶ Signal output UX	▷ 0.10V ▷ PWM			PWM	
	6078	▶ Function output UX2	▷ None ▷ Boiler pump Q1 ▷ DHW pump Q3 ▷ DHW interm circ pump Q33 ▷ Heat circuit pump HC1 Q2 ▷ Heat circuit pump HC2 Q6 ▷ Heat circuit pump HC3 Q20 ▷ Collector pump Q5 ▷ Solar pump ext exch K9 ▷ Solar pump buffer K8 ▷ Solar pump swi pool K18 ▷ Instant heater pump Q34 ▷ Solid fuel boiler pump Q10 ▷ Bypass pump Q12			None	
	6079	▶ Signal logic output UX2	▷ Standard ▷ Inverted			Standard	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	6085	▶ Function output P1	<ul style="list-style-type: none"> ▷ None ▷ Boiler pump Q1 ▷ DHW pump Q3 ▷ DHW interm circ pump Q33 ▷ Heat circuit pump HC1 Q2 ▷ Heat circuit pump HC2 Q6 ▷ Heat circuit pump HC3 Q20 ▷ Collector pump Q5 ▷ Solar pump ext exch K9 ▷ Solar pump buffer K8 ▷ Solar pump swi pool K18 ▷ Instant heater pump Q34 		None	
	6089	▶ Function output UX3	Same as Pgm Nb 6078		None	
	6097	▶ Sensor type collector	<ul style="list-style-type: none"> ▷ NTC ▷ Pt 1000 		NTC	
	6098	▶ Readjustm collector sensor			0°C	
	6100	▶ Readjustm outside sensor			0°C	
	6110	▶ Time constant building			15 h	
	6116	▶ Time constant setp compens			0min	
	6117	▶ Central setp compensation			20°C	
	6120	▶ System frost protection	<ul style="list-style-type: none"> ▷ Off ▷ On 		Off	
	6127	▶ Pump/Valve kick duration			30s	
	6200	▶ Save sensors	<ul style="list-style-type: none"> ▷ No ▷ Yes 		No	
	6204	▶ Save parameters	<ul style="list-style-type: none"> ▷ No ▷ Yes 		No	
	6205	▶ Reset to default parameters	<ul style="list-style-type: none"> ▷ Off ▷ On 		Off	
	6212	▶ Check no. heat source 1				
	6213	▶ Check no. heat source 2				
	6215	▶ Check no. storage tank				
	6217	▶ Check no. heating circuit				
	6220	▶ Software version				
	6240	▶ Funct output UX21 module 1	Same as Pgm Nb 6078			None

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	6241	▶ Sign logic out UX21 module1	▷ Standard ▷ Inverted			Inverted
	6242	▶ Signal output UX21 module 1	▷ 0-10 V ▷ PWM		PWM	
	6243	▶ Funct output UX22 module 1	<i>Same as Pgm Nb 6078</i>		None	
	6244	▶ Sign logic out UX22 module1	▷ Standard ▷ Inverted		Standard	Inverted
	6245	▶ Signal output UX22 module 1	▷ 0-10 V ▷ PWM		PWM	
	6246	▶ Funct output UX21 module 2	<i>Same as Pgm Nb 6078</i>		None	
	6247	▶ Sign logic out UX21 module2	▷ Standard ▷ Inverted		Standard	Inverted
	6248	▶ Signal output UX21 module 2	▷ 0-10 V ▷ PWM		PWM	
	6249	▶ Funct output UX22 module 2	<i>Same as Pgm Nb 6078</i>		None	
	6250	▶ Sign logic out UX22 module2	▷ Standard ▷ Inverted		Standard	Inverted
	6251	▶ Signal output UX22 module 2	▷ 0-10 V ▷ PWM		PWM	
	6252	▶ Funct output UX21 module 3	<i>Same as Pgm Nb 6078</i>		None	
	6253	▶ Sign logic out UX21 module3	▷ Standard ▷ Inverted		Standard	Inverted
	6254	▶ Signal output UX21 module 3	▷ 0-10 V ▷ PWM		PWM	
	6255	▶ Funct output UX22 module 3	<i>Same as Pgm Nb 6078</i>		None	
	6256	▶ Sign logic out UX22 module3	▷ Standard ▷ Inverted		Standard	Inverted
	6257	▶ Signal output UX22 module 3	▷ 0-10 V ▷ PWM		PWM	
	6355	▶ Room controller HC1	▷ internally ▷ externally		internally	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Configuration (cont'd)	6356	▶ Room controller HC2	Same as Pgm Nb 6355		internally	
	6357	▶ Room controller HC3	Same as Pgm Nb 6355		internally	
LPB system	6600	▶ Device address			1	
	6601	▶ Segment address			0	
	6604	▶ Bus power supply function	▷ Off ▷ Automatically			Automatically
	6605	▶ Bus power supply state	▷ Off ▷ On			On
	6610	▶ Display system messages	▷ No ▷ Yes			Yes
	6612	▶ Alarm Delay				10 min
	6620	▶ Action changeover functions	▷ Segment ▷ System			System
	6621	▶ Summer changeover	▷ Locally ▷ Centrally			Locally
	6623	▶ Optg mode changeover	▷ Locally ▷ Centrally			Centrally
	6624	▶ Manual source lock	▷ Locally ▷ Centrally			Locally
	6625	▶ DHW assignment	▷ Local CHs ▷ All CHs in segment ▷ All CHs in system			All CHs in system
	6630	▶ Cascade master	▷ Always ▷ Automatically			Automatically
	6631	▶ Ext source in Eco mode	▷ Off ▷ On DHW ▷ On			Off
	6632	▶ Note OT limit ext source	▷ No ▷ Yes			No
	6640	▶ Clock mode	▷ Autonomously ▷ Slave without remote setting ▷ Slave with remote setting ▷ Master			Autonomously
	6650	▶ Outside temp source				

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Modbus	6651	▶ Slave address				1
	6652	▶ Baud rate	▷ 1,200 ▷ 2,400 ▷ 4,800 ▷ 9,600 ▷ 19,200			19200
	6653	▶ Parity	▷ Even ▷ Odd ▷ None			Even
	6654	▶ Stop bit	▷ 1 ▷ 2			1
Fault	6705	▶ SW Diagnostic code				
	6706	▶ Burn ctrl phase lockout pos				
	6710	▶ Reset alarm relay	▷ No ▷ Yes		No	
	6740	▶ Flow temp 1 alarm			120 min	
	6741	▶ Flow temp 2 alarm			120 min	
	6742	▶ Flow temp 3 alarm			120 min	
	6743	▶ Boiler temp alarm			120 min	
	6745	▶ DHW charging alarm			8 h	
	6800	▶ History 1	▷ Date / Time ▷ Fault code 1			
	6805	▶ SW diagnostic code 1	▷ Burner control phase 1			
	6990	▶ History 20	▷ Date / Time ▷ Fault code 20			
	6995	▶ SW diagnostic code 20	▷ Burner control phase 20			
Service/special operation	7040	▶ Burner hours interval			--h	1500 h
	7041	▶ Burn hrs since maintenance	▷ Reset? Yes/No		0 h	
	7042	▶ Burner start interval			25000	9000
	7043	▶ Burn starts since maint	▷ Reset? Yes/No		0	
	7044	▶ Maintenance interval			14 months	24 months
	7045	▶ Time since maintenance	▷ Reset? Yes/No		0 months	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Service/special operation (Cont'd)	7050	▶ Fan speed ionization current			0 rpm	
	7051	▶ Message ionization current	▷ No ▷ Yes		No	
	7130	▶ Chimney sweep function	▷ Off ▷ On		Off	
	7131	▶ Burner output	▷ Partial load ▷ Full load ▷ Max heating load		Max heating load	
	7140	▶ Manual control	▷ Off ▷ On		Off	
	7143	▶ Controller stop function	▷ Off ▷ On		Off	
	7145	▶ Controller stop setpoint				
	7146	▶ Deaeration function	▷ Off ▷ On		Off	
	7147	▶ Type of venting	▷ None ▷ Heating circuit continuous ▷ Heating circuit cycled ▷ DHW continuous ▷ DHW cycled		None	
	7167	▶ Commissioning wizard	▷ Off ▷ On		On	
	7170	▶ Telephone customer service			---	
	7250	▶ PStick storage pos				
	7252	▶ PStick command	▷ No operation ▷ Reading from stick ▷ Writing on stick		No operation	
	7253	▶ Pstick progress			0%	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default			
				Nesta	Nesta Plus	Nesta Chrome	
Input/output test	7700	▶ Relay test	<ul style="list-style-type: none"> ▷ No test ▷ Everything off ▷ Relay output QX1 ▷ Relay output QX2 ▷ Relay output QX3 ▷ Relay output QX4 ▷ Relay output QX21 module 1 ▷ Relay output QX22 module 1 ▷ Relay output QX23 module 1 ▷ Relay output QX21 module 2 ▷ Relay output QX22 module 2 ▷ Relay output QX23 module 2 ▷ Relay output QX21 module 3 ▷ Relay output QX22 module 3 ▷ Relay output QX23 module 3 	No test			
	7713	▶ Output test P1			%		
	7714	▶ PWM signal P1				%	
	7716	▶ Output test UX2					
	7717	▶ Output signal UX2					
	7724	▶ Output test UX3					
	7725	▶ Output signal UX3					
	7730	▶ Outside temp B9				°C	
	7750	▶ Hot water temp B3/B38				°C	
	7760	▶ Boiler temp B2				°C	
	7820	▶ Sensor temp BX1				°C	
	7821	▶ Sensor temp BX2				°C	
	7822	▶ Sensor temp BX3				°C	
	7823	▶ Sensor temp BX4				°C	
	7830	▶ Sensor temp BX21 module 1				°C	
	7831	▶ Sensor temp BX22 module 1				°C	
	7832	▶ Sensor temp BX21 module 2				°C	
	7833	▶ Sensor temp BX22 module 2				°C	
	7834	▶ Sensor temp BX21 module 3				°C	
	7835	▶ Sensor temp BX22 module 3				°C	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Input/output test (cont'd)	7840	▶ Voltage signal H1				
	7841	▶ Contact state H1	▷ Open ▷ Closed		Open	
	7845	▶ Voltage signal H2 module 1	<i>Parameters see Contact state H1</i>			
	7846	▶ Contact state H2 module 1	▷ Open ▷ Closed	Open	Closed	
	7848	▶ Voltage signal H2 module 2	<i>Parameters see Contact state H1</i>			
	7849	▶ Contact state H2 module 2	▷ Open ▷ Closed		Open	
	7851	▶ Voltage signal H2 module 3	<i>Parameters see Contact state H1</i>			
	7852	▶ Contact state H2 module 3	▷ Open ▷ Closed		Open	
	7854	▶ Voltage signal H3				
	7855	▶ Contact state H3	▷ Open ▷ Closed		Closed	
	7860	▶ Contact state H4	▷ Open ▷ Closed		Closed	
	7862	▶ Frequency H4				
	7865	▶ Contact state H5	▷ Open ▷ Closed		Open	
	7872	▶ Contact state H6	▷ Open ▷ Closed		Open	
	7874	▶ Contact state H7	▷ Open ▷ Closed		Open	
	7950	▶ Input EX21 module 1			V	
	7951	▶ Input EX21 module 2				
	7952	▶ Input EX21 module 3				

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
State	8000	▶ State heating circuit 1				
	8001	▶ State heating circuit 2				
	8002	▶ State heating circuit 3				
	8003	▶ State DHW				
	8005	▶ State boiler				
	8007	▶ State solar				
	8008	▶ State solid fuel boiler				
	8009	▶ State burner				
	8010	▶ State buffer				
	8011	▶ State swimming pool				
	Diagnostics heat generation	8304	▶ Boiler pump Q1	▷ Off ▷ On ▷ No function (if not connected)		Off / No function
8308		▶ Boiler pump speed			%	
8310		▶ Boiler temp. ▶ Control temperature			°C	
8311		▶ Boiler setpoint ▶ Control setpoint			°C	
8312		▶ Boiler switching point ▶ Switch point DHW opera,			°C	
8313		▶ Control sensor	▷ None ▷ Boiler sensor B2 ▷ Return sensor B7 ▷ DHW ▷ charging sensor B36 ▷ DHW outlet sensor B38 ▷ DHW circulation sensor B39 ▷ Cascade sensor B10/B70		None	
8314		▶ Boiler return temp ▶ Boiler return temp set			°C	
8316		▶ Flue gas temp			°C	
8318		▶ Flue gas temp max	▷ Reset? Yes/No		°C	



Refer to **“Operating States - Codes and Meanings”** on page 43 for a detail of the codes displayed on the screen.

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default			
				Nesta	Nesta Plus	Nesta Chrome	
Diagnostics heat generation (Cont'd)	8321	▶ Primary exchanger temp			°C		
	8323	▶ Fan speed			rpm		
	8324	▶ Setpoint fan			rpm		
	8325	▶ Current fan control			rpm		
	8326	▶ Burner modulation			%		
	8327	▶ Water pressure			bar		
	8329	▶ Ionization current			μA		
	8330	▶ Hours run 1st stage, ▶ Start countrr 1st stage			h		
	8338	▶ Hours run heating mode			h		
	8339	▶ Hours run HW			h		
	8366	▶ Boiler throughput			l/min		
	8378	▶ Total gas energy heating			kWh		
	8379	▶ Total gas energy DHW			kWh		
	8380	▶ Total gas energy			kWh		
	8381	▶ Gas energy heating	▷ Reset? Yes/No		kWh		
	8382	▶ Gas energy DHW	▷ Reset? Yes/No		kWh		
	8383	▶ Gas energy			kWh		
	8390	▶ Current phase number					
	8526	▶ 24-hour yield solar energy			kWh		
	8527	▶ Total yield solar energy	▷ Reset? Yes/No		kWh		
	8530	▶ Hours run solar yield	▷ Reset? Yes/No		h		
	8531	▶ Hours run collect overtemp	▷ Reset? Yes/No		h		
	8532	▶ Hours run collector pump	▷ Reset? Yes/No		h		
	Diagnostics consumers	8700	▶ Outside temp			°C	
		8701	▶ Outside temp min	▷ Reset? Yes/No		°C	
		8702	▶ Outside temp max	▷ Reset? Yes/No		°C	
8703		▶ Outside temp attenuated	▷ Reset? Yes/No		°C		
8704		▶ Outside temp composite					

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Diagnostics consumers (Cnt'd)	8730	▶ Heating circuit pump 1	▷ Off ▷ On	Off / No function (if not connected)		
	8731	▶ Heat circ mix valve 1 open	▷ Off ▷ On	Off / No function (if not connected)		
	8732	▶ Heat circ mix valve 1 close	▷ Off ▷ On	Off / No function (if not connected)		
	8735	▶ Speed heating circuit pump 1		%		
	8740	▶ Room temp 1 ▶ Room setpoint 1		°C		
	8743	▶ Flow temp 1 ▶ Flow temp setpoint 1		°C		
	8749	▶ Room thermostat 1	▷ No demand ▷ Demand	No demand		
	8760	▶ Central heating pump 2	▷ Off ▷ On	Off / No function (if not connected)		
	8761	▶ Heat circ mix valve 2 open	▷ Off ▷ On	Off / No function (if not connected)		
	8762	▶ Heat circ mix valve 2 close	▷ Off ▷ On	Off / No function (if not connected)		
	8765	▶ Speed heating circuit pump 2		%		
	8770	▶ Room temp 2 ▶ Room setpoint 2		°C		
	8773	▶ Flow temp 2 ▶ Flow temp setpoint 2		°C		
	8775	▶ Flow temp setp VK1		°C		
	8779	▶ Room thermostat 2	▷ No demand ▷ Demand	No demand		
	8950	▶ Common flow temp ▶ Common flow temp setpoint		°C		
	8952	▶ Common return temp		°C		

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Diagnostics consumers (Cnt'd)	8962	▶ Common output setpoint			%	
	8980	▶ Buffer temp 1,			°C	
	8981	▶ Buffer setpoint	▷ Reset ? Yes/No		°C	
	8982	▶ Buffer temp 2			°C	
	9005	▶ Water pressure H1			bar	
	9006	▶ Water pressure H2			bar	
	9016	▶ Special temp 1			°C	
	9017	▶ Special temp 2			°C	
	9031	▶ Relay output QX1	▷ Off ▷ On		Off / No function (if not connected)	
	9032	▶ Relay output QX2	▷ Off ▷ On		Off / No function (if not connected)	
	9033	▶ Relay output QX3	▷ Off ▷ On		Off / No function (if not connected)	
	9053	▶ Relay output QX21 module 2	▷ Off ▷ On		Off / No function (if not connected)	
	9054	▶ Relay output QX22 module 2	▷ Off ▷ On		Off / No function (if not connected)	
	9055	▶ Relay output QX23 module 2	▷ Off ▷ On		Off / No function (if not connected)	
	9056	▶ Relay output QX21 module 3	▷ Off ▷ On		Off / No function (if not connected)	
	9057	▶ Relay output QX22 module 3	▷ Off ▷ On		Off / No function (if not connected)	
	9058	▶ Relay output QX23 module 3	▷ Off ▷ On		Off / No function (if not connected)	
	Burner Control	9500	▶ Prepurge time			32 s
9501		▶ Prepurge time min			32 s	
9504		▶ Required speed prepurging			rpm	
9505		▶ Req speed prepurging min			rpm	
9506		▶ Speed tolerance prepurging			rpm	

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default			
				Nesta	Nesta Plus	Nesta Chrome	
Burner Control (Cont'd)	9512	▶ Required output ignition			rpm		
	9513	▶ Required speed ignition max			rpm		
	9514	▶ Speed tolerance ignition			200 rpm	300 rpm	150 rpm
	9517	▶ Preignition time			s		
	9518	▶ Safety time			s		
	9519	▶ Safety time with ignition			s		
	9524	▶ Required speed LF			rpm		
	9525	▶ Required speed LF min			rpm		
	9526	▶ Speed tolerance LF			200 rpm		100 rpm
	9529	▶ Required speed RF			rpm		
	9530	▶ Required speed HF max.			rpm		
	9531	▶ Speed tolerance HF			300 rpm		100 rpm
	9534	▶ Optg time with ignition load			3s		
	9540	▶ Post-purge time			5s		
	9541	▶ Postpurge time TL max			5 min		3 min
	9542	▶ Postpurge time min			s		5 s
	9551	▶ Required speed stop max.			300 rpm		500 rpm
	9610	▶ Capacity		<ul style="list-style-type: none"> ▷ Up to 70 kW ▷ Up to 120 kW ▷ Above 120 kW 		Above 120 kW	
	9611	▶ LP configuration.		▷ LP mode 1 to 5		LP mode 5	LP mode 1
	9612	▶ GP configuration.		<ul style="list-style-type: none"> ▷ GP not connected ▷ GP connected 		GP connected	
	9614	▶ Postpurging level.		<ul style="list-style-type: none"> ▷ Run ▷ Prepurge 		Prepurge	
	9615	▶ Forced prepurging on error.		<ul style="list-style-type: none"> ▷ off ▷ on 		On	
	9616	▶ Max speed.				rpm	
	9630	▶ Speed Kp					

CONTROLLER OPERATION

Top menu	Pgm No.	Submenu 1	Submenu 2	Default		
				Nesta	Nesta Plus	Nesta Chrome
Burner Control (Cont'd)	9631	▶ Speed Tn			s	
	9632	▶ Speed Tv			s	
	9650	▶ Chimney drying	▷ Off ▷ Temporarily ▷ Permanently			
	9651	▶ Req speed chimney drying			500 rpm	
	9552	▶ Duration chimney drying			10 min	

CONTROLLER OPERATION

Operating States - Codes and Meanings

The following tables indicate the meaning of the state codes used for the program lines 8000 to 8011.

Some of these codes are for the installer only, and some are visible to the end user.

The meaning of the codes visible at the end-user and installer levels are shown in italics.

Pgm lines	State code	Meaning
8000 to 8002	3	Limit thermostat hat cut out
	4	Manual control active
	102	Floor curing function active
	56	Overtemperature protection active
	103	Restricted, boiler protection
	104	Restricted, DHW priority
	105	Restricted, buffer priority
	106	Heating mode restricted
	107	Forced discharging buffer storage tank
	108	Forced discharging DHW
	109	Forced discharging heat source
	110	Forced heat release
	17	Overrun active
	110	Forced heat release
	298	Warmer function active
	299	Cooler function active
	111	Optimum start control + boost heating
	112	Optimum start control
	113	Boost heating
	114	Heating mode Comfort
115	Optimum stop control	
116	Heating mode Reduced	
101	Frost protection room active	

CONTROLLER OPERATION

Pgm lines	State code	Meaning
8000 to 8002	117	Frost protection flow active
	23	Frost protection plant active
	24	Frost protection active
	248	Continuous pump operation
	118	Summer operation
	119	24-hour ECO active
	120	Setback reduced
	121	Setback frost protection
	122	Room temperature limit
	25	Off
8003	3	Limit thermostat has cut out
	4	Manual control active
	199	Draw-off mode
	222	Keep hot mode active
	221	Keep hot mode On
	77	Recooling via collector
	78	Recooling via DHW/HCs
	53	Recooling active
	79	Discharging protection active
	80	Charging time limitation active
	81	DHW charging locked
	82	Charging lock active
	83	Forced, max stor tank temp
	84	Forced, max charging temp

Pgm lines	State code	Meaning
8003	85	Forced, Legionella setpoint
	86	Forced, Nominal setpoint
	67	Forced charging active
	87	Charging electric, Legionella setpoint
	88	Charging electric, Nominal setpoint
	89	Charging electric, Reduced setpoint
	90	Charging electric, Frost Protection setpoint
	91	El imm heater released
	66	Charging el im heater
	92	Push, Legionella setpoint
	93	Push, Nominal setpoint
	94	Push active
	95	Charging, Legionella setpoint
	96	Charging, Nominal setpoint
	97	Charging, Reduced setpoint
	69	Charging active
	24	Frost protection active
	223	Frost protection instantaneous water heater
	24	Frost protection active
	17	Overrun active
201	Standby charging	
70	Charged, max stor temp	
71	Charged, max charg temp	
98	Forced, legionella temp	
99	Charged, nominal temp	

CONTROLLER OPERATION

Pgm lines	State code	Meaning
8003	100	Forced, reduced temp
	75	Charged
	25	Off
	200	Ready
8005	245	Safety limit thermostat limits output
	1	SLT has cut out
	123	SLT test active
	2	Fault
	232	Flue gas temperature, shutdown
	233	Flue gas temperature, load limitation
	234	Flue gas temperature to high
	3	Limit thermostat has cut out
	4	Manual control active
	253	Low flow rate
	220	Controller stop active
	5	Chimney sweep function, high-fire
	6	Chimney sweep function, low-fire
	7	Chimney sweep function active
	8	Locked, manually
	172	Locked, solid fuel boiler
	9	Locked, automatically
	176	Locked, outside temperature
	198	Locked, Economy mode
	10	Locked
20	Minimum limitation	

Pgm lines	State code	Meaning
8005	21	Minimum limitation, low-fire
	22	Minimum limitation active
	11	Protective startup
	12	Protective startup, low-fire
	13	Return limitation
	14	Return temperature limitation, low-fire
	18	In operation
	59	Charging buffer storage tank
	170	In operation for HC, DHW
	171	In low-fire operation for HC, DHW
	173	Released for HC, DHW
	168	In operation for DHW
	169	In low-fire operation for DHW
	174	Released for DHW
	166	In operation for heating circuit
	167	In low-fire operation for HC
	175	Released for HC
	17	Overrun active
	19	Released
	23	Frost protection plant active
	24	Frost protection active
	25	Off

CONTROLLER OPERATION

Pgm lines	State code	Meaning
8007	4	Manual control active
	2	Fault
	52	Frost protection collector active
	53	Recooling active
	54	Max stor tank temp reached
	55	Evaporation protection active
	56	Overtemp protection active
	57	Max charg temp reached
	151	Charging DHW + buffer + swi pool
	152	Charging DHW + buffer
	153	Charging DHW + swi pool
	154	Charging buffer + swimming pool
	58	Charging DHW
	59	Charging buffer storage tank
	60	Charg swimm pool
	61	Min charg temp not reached
	62	Temp diff insufficient
63	Radiation insufficient	
8008	4	Manual control active
	2	Fault
	56	Overtemp protection active
	17	Overrun active
	18	In operation
163	Assisted firing fan active	

Pgm lines	State code	Meaning
8008	23	Frost protection plant active
	141	Frost protection boiler active
	24	Frost protection active
	25	Off
8009	211	Lockout
	212	Start prevention
	18	In operation
	214	Safety time
	218	Prepurging
	215	Startup
	219	Postpurging
	213	Shutdown
	217	Home run
216	Standby	
8010	24	Frost protection active
	67	Forced charging active
	68	Partial charging active
	69	Charging active
	77	Recooling via collector
	142	Recooling via DHW/HCs
	53	Recooling active
	70	Charged, max stor temp
	71	Charged, max charg temp
	72	Charged, forced charg required temp
73	Charged, required temp	

CONTROLLER OPERATION

Pgm lines	State code	Meaning
8010	74	Partially charged, temp setpoint
	143	Charged, min charg temp
	75	Charged
	76	Cold
	51	No request for heat
8011	4	Manual control active
	2	Fault
	106	Heating mode restricted
	110	Forced heat release
	155	Heating mode, generation
	137	Heating mode
	156	Heated, max sw pool temp
	158	Heated, solar setpoint
	157	Heated, source setpoint
	159	Heated
	160	Heating mode, solar Off
	161	Heating mode, heat source Off
	162	Heating Off
76	Cold	

ERROR CODES

Error code	Fault description	Explanation	Action(s)
10	Outside temperature sensor error		Check connection and/or sensor. Replace as required. Emergency operation Contact AIC technical support.
20	Boiler temperature 1, sensor error	Short circuit or Open circuit boiler flow sensor.	Check connection and sensor. Replace as required.
26	Common flow temperature, sensor error	Short circuit or Open circuit common flow temperature sensor.	Check connection and sensor. Replace as required.
28	Flue gas temperature sensor error	Short circuit or Open circuit flue gas sensor.	Check connection and sensor. Replace as required.
30	Flow temperature 1, sensor error	Short circuit or Open circuit flow sensor.	Check connection and sensor. Replace as required.
32	Flow temperature 2, sensor error	Short circuit or Open circuit boiler flow sensor.	Check connection and sensor. Replace as required.
38	Flow temperature, primary controller, sensor error		Check connection and sensor. Replace as required.
40	Return temperature 1, sensor error	Short circuit or Open circuit boiler return sensor.	Check connection and sensor. Replace as required.
46	Cascade return temperature, sensor error		Check connection and sensor. Replace as required.
47	Common return temperature, sensor error		Check connection and sensor. Replace as required.
50	DHW temperature 1 sensor error		Check connection and sensor. Replace as required.
52	DHW temperature 2, sensor error		Check connection and sensor. Replace as required.
54	Flow temperature DHW, sensor error	Short circuit or Open circuit DHW flow sensor.	Check connection and sensor. Replace as required.
57	DHW circulation, sensor error		Check connection and sensor. Replace as required.
60	Room temperature 1, sensor error		Check connection and sensor. Replace as required.
65	Room temperature 2, sensor error		Check connection and sensor. Replace as required.
68	Room temperature 3, sensor error		Check connection and sensor. Replace as required.
70	Storage tank temperature 1 (top), sensor error		Check connection and sensor. Replace as required.
71	Storage tank temperature 2 (bottom), sensor error		Check connection and sensor. Replace as required.
72	Storage tank temperature 3 (center), sensor error		Check connection and sensor. Replace as required.
78	Water pressure, sensor error		Check connection and sensor. Replace as required.



ERROR CODES

Error code	Fault description	Explanation	Action(s)
81	LPB short circuit or no bus power supply		Check LPB connections and bus power supply.
82	LPB address collision		Check addresses of connected control modules
83	BSB wire cross-sectional/no communication		Check connection of the room units
84	BSB wire address collision	2 room devices have the same assignment (prog. no. 42)	Correct device address.
85	BSB RF communication error		Check bus connection and components.
91	Data overrun in EEPROM	Internal fault in controller, process sensor	Contact AIC technical support.
98	Extension module 1, error		Check extension module connections.
99	Extension module 2, error		Check extension module connections.
100	2 clock time masters		Check time master
102	Clock time master without backup		Check clock
103	Communication error		Check connection and components
105	Maintenance message		See maintenance code (press information button once) for detailed information
109	Supervision boiler temperature		Contact AIC technical support.
110	STB (SLT) lockout	No heat removal, STB interruption, possible short-circuit in the gas valve, internal fuse faulty; Internal pump malfunction	Allow device to cool down and carry out reset; if the fault occurs several times inform AIC technical support Check the internal pump, water cooled burner plate not properly air-vented
111	Temperature limiter safety shutdown		Contact AIC technical support.
117	Water pressure too high		Release the water to a suitable pressure
118	Water pressure too low		Top up the system with water to reach a suitable pressure
121	Flow temperature heating circuit 1 not reached	Heat losses in circuit	Check the circuit for fault insulation and heat losses.
122	Flow temperature heating circuit 2 not reached	Heat losses in circuit	Check the circuit for fault insulation and heat losses.
125	Maximum boiler temperature exceeded		Contact AIC technical support.
126	DHW charging temperature not reached		Check operation and heat up times for DHW
127	DHW legionella temperature not reached		Check operation of appliance
128	Loss of flame during operation	Ionization current lost after successful ignition	Check electric supply, polarity and ionization electrode, as well as ignition components/parameters.
129	Wrong air supply		Check air supply


ERROR CODES

Error code	Fault description	Explanation	Action(s)
130	Flue gas temperature limit exceeded	Heat engine is overheating	Check causes of high temps Check connection and sensor. Replace as required Check connection and chimney.
132	Gas pressure switch safety shut down	Lack of gas	Check gas supply and pressure Check connection and component
133	Safety time for establishment of flame exceeded	Lack of gas, Polarity of mains connection, safety period,	Reset, if the fault re-occurs more than 3 times, contact AIC technical support. Check ignition electrode and ionization current
146	Configuration error sensor/controlling elements		Check sensor configuration or replace component
151	LMS14... error, internally		Check parameters (see adjustment table installer and/or call-up values) Reset controller and/or replace as required, Check electrode wiring Contact AIC technical support.
152	Parameterization error	Incorrect / Conflicting parameters input.	Verify parameters or reset to default parameters
153	Unit manually locked	Reset button stuck in	Check reset button
160	Fan speed threshold not reached	Fan/relay possibly defective, speed threshold set wrongly.	Check parameters, connections and component. Replace as required
162	Air pressure switch error	Air pressure switch/Flue pressure switch does not close	Check flue path for obstructions. Unblock as required Check connection/wiring and pressure switch. Replace as required. Floor appliances (from 120 kW): Check air intake for obstructions. Unblock as required.
164	Flow/pressure switch, heating circuit error	No flow detected	Remove the air from the circuit; Update the parameter set. Check connection and switches in HC. Replace as required
166	Air pressure switch error	Air pressure switch does not open	Check connection and adjustments on air pressure switch. Replace as required.
170	Error water pressure sensor, primary side		Check connection and sensor. Replace as required.
171	Alarm contact 1 active		
172	Alarm contact 2 active		
173	Alarm contact 3 active		
174	Alarm contact 4 active		Correct the active fault

ERROR CODES

Error code	Fault description	Explanation	Action(s)
176	Water pressure 2 too high		Release the water to a suitable pressure.
177	Water pressure 2 too low		Top up the system with water to reach a suitable pressure.
178	Temperature limiter heating circuit 1		Allow the circuit to cool down and carry out reset; if the fault occurs several times inform AIC technical support.
179	Temperature limiter heating circuit 2		Allow the circuit to cool down and carry out reset; if the fault occurs several times inform AIC technical support.
183	Unit in parametrization mode		Wait until parametrization process is complete
193	Start prevention signal input	<p>Short circuit or Open circuit According to appliance model, can apply to the following :</p> <ul style="list-style-type: none"> ▶ condensate level switch ▶ burner plate temp. limit switch ▶ Additional external max. temp limit switch ▶ Additional external max. pressure limit switch ▶ Gas overpressure switch (N 1080-1260 FSW only) 	<p>Nesta 120 to 300 kW & Texas 99-230 kW:</p> <ol style="list-style-type: none"> 1. Check connection/wiring and condensate level switch. Replace as required 2. Check connection/wiring and burner plate temp. limit switch. Replace as required <p>Nesta Plus 280 to 840 kW (N 280 to 840 FS)</p> <ol style="list-style-type: none"> 1. Check connection/wiring and condensate level switch. Replace as required. 2. Check connection/wiring and burner plate temp. limit switch. Replace as required <p>Nesta Plus with water-cooled burner plate , from 280 to 1260 kW (N 280 to 1260 FSW)</p> <ol style="list-style-type: none"> 1. Check connection/wiring and condensate level switch. Replace as required. 2. Check connection/wiring and switch of Gas Overpressure Switch (N 1080-1260 FSW only). Replace as required. If the problem is not solved, contact AIC Technical support. <p>Floor appliances >300 kW</p> <p> <i>This point is not applicable in Italy.</i></p> <p>Check additional external max temp limit switch and additional external max pressure limit switch and connection. Replace as required</p>
195	Maximum duration of the refill per charging exceeded		Check automatic refill system.
<p> <i>The use of an automatic refill system is not recommended</i></p>			
196	Maximum duration of the refill per week exceeded		Check automatic refill system.

ERROR CODES

Error code	Fault description	Explanation	Action(s)
 The use of an automatic refill system is not recommended			
209	Fault heating circuit		Check the heating circuit configuration. Reset to default parameters
216	Fault boiler		Check the heating circuit configuration. Reset to default parameters
217	Sensor error		Check connection and sensor. Replace as required.
218	Pressure supervision		Check system pressure.
243	Swimming pool sensor, error		Check connection and sensor. Replace as required.
260	Flow temperature 3, sensor error		Check connection and sensor. Replace as required.
270	Temperature difference, heat exchanger too large		Check the heating system external hydraulic components.
317	Mains frequency outside permissible range		Check correct electric supply in boiler terminals.
320	DHW charging temperature, sensor error		Check connection and sensor. Replace as required.
321	DHW outlet temperature, sensor error		Check connection and sensor. Replace as required.
322	Water pressure 3 too high		Release the water to a suitable pressure.
323	Water pressure 3 too low		Top up the system with water to reach a suitable pressure.
324	Input BX, same sensors		Check configuration in parameters list
325	Input BX/extension module, same sensors		Check configuration in parameters list.
326	Input BX/mixing group, same sensors		Check configuration in parameters list.
327	Extension module, same function		Check configuration in parameters list.
328	Mixing group, same function		Check configuration in parameters list.
329	Extension module/mixing group same function		Check configuration in parameters list.
330	Sensor input BX1 without function		Connect temperature sensor in BX terminal
331	Sensor input BX2 without function		Connect temperature sensor in BX terminal
332	Sensor input BX3 without function		Connect temperature sensor in BX terminal
333	Sensor input BX4 without function		Connect temperature sensor in BX terminal
335	Sensor input BX21 without function		Connect temperature sensor in BX terminal
336	Sensor input BX22 without function		Connect temperature sensor in BX terminal

ERROR CODES

Error code	Fault description	Explanation	Action(s)
341	Sensor B6 missing	Solar sensor missing	Check parameters, connection and component.
349	Buffer storage tank return valve Y15 missing		Check connection of return valve Y15. Replace as required.
350	Buffer storage tank address error		Correct device address.
351	Primary controller/ system pump, address error		Correct device address.
352	Pressureless header, address error		Correct device address.
353	Sensor B10 missing	Common flow sensor missing	Check parameters, connection and component
371	Flow temperature heating circuit 3		Check the circuit for fault insulation and heat losses.
372	Temperature limiter heating circuit 3		Allow the circuit to cool down and carry out reset; if the fault occurs several times inform AIC technical support.
378	Internal repetition		Contact AIC technical support
382	Repetition speed		Contact AIC technical support
384	Extraneous light		Shut off gas supply and contact AIC technical support
385	Mains undervoltage		Check electric supply in boiler terminals
386	Fan speed tolerance		Check air supply
388	DHW sensor no function		Check connection and sensor. Replace as required.
391	Room controller 1		
392	Room controller 2		Check addresses and parameters
393	Room controller 3		
426	Feedback flue gas damper		Check the connection and component
427	Configuration flue gas damper		Check configuration parameters
429	Dynamic water pressure too high	Expansion tank is defective	Verify pump Replace expansion tank
430	Dynamic water pressure too low		Verify pump
431	Sensor primary heat exchanger		Check connection and sensor. Replace as required.
432	Function ground not connected		Check ground connection and install as required
433	Temperature primary heat exchanger too high		Check the heating system external hydraulic components.