Gas fired condensing boiler

C 230 ECO





User Guide



300015144-02

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1 Safety instructions

🔨 Danger

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Any operation on the installation must be performed by a qualified technician respecting professional regulations and in accordance with this document.

Before any work, switch off the mains supply to the appliance. Protect the installation against any unwanted restarts.

For a proper operating of the boiler, follow carefully the instructions.

The manufacturer is not liable for any improper use of the appliance or failure to maintain or install the unit correctly (the user shall take care to ensure that the system is installed by a qualified engineer).

Work on electrical equipment must be carried out by a qualified professional in compliance with the prevailing regulations.

1.1 General safety instructions

1.1.1 Fire hazard



If you smell gas, do not use a naked flame, do not smoke, do not operate electrical contacts or switches (doorbell, lights, motor, lift, etc.).
 1.Shut off the gas supply
 2.Open the windows
 3.Extinguish all flames
 4.Evacuate the premises
 5.Contact a qualified professional

6.Inform the gas supplier

- Check that the appliance is properly set for the type of gas used.
- Keep to the polarity shown on the terminals: phase (L), neutral (N) and earth 는.
- Check the seal on the gas and water pipe connections.
- We shall not accept any responsibility for any damage and disturbance arising from not following these instructions.
- Incorrect use or unauthorised modifications to the installation or the equipment itself invalidate any right to claim.
- Allowance must be made for a means of disconnection in the fixed pipes in accordance with the regulations on installations.
- If a power cord is provided with the appliance and it turns out to be damaged, it must be replaced by the manufacturer, its after sales service or persons with similar qualifications in order to obviate any danger.
- Respect the maximum water inlet pressure to ensure correct operation of the appliance, referring to the chapter "Technical Specifications".

1.1.2 Risk of intoxication

尒	Do not obstruct	the	air	inlets	in	the	room	(even
	partially).							

If you smell flue gases

- 1. Switch the appliance off
- 2. Open the windows
- **3.** Evacuate the premises
- 4. Contact a qualified professional

1.1.3 Risk of being burnt

- Avoid direct contact with the flame viewport.
- Depending on the settings of the appliance:
 - The temperature of the flue gas conduits may exceed 60°C
 - The temperature of the radiators may reach 95°C
 - The temperature of the domestic hot water may reach 65°C

1.1.4 Risk of damage

Do not stock chloride or fluoride compounds close to the appliance.

Install the appliance in frost-free premises.

Do not neglect to service the appliance: Contact a qualified professional or take out a maintenance contract for the annual servicing of the appliance.

1.2 Recommendations

- For a proper operating of the boiler, follow carefully the instructions.
- Any intervention on the appliance and heating equipment must be carried out by a qualified engineer.
- The manufacturer is not liable for any improper use of the appliance or failure to maintain or install the unit correctly (the user shall take care to ensure that the system is installed by a qualified engineer).
- Work on electrical equipment must be carried out by a qualified professional in compliance with the prevailing regulations.
- Check that the appliance is properly set for the type of gas used.
- Keep to the polarity shown on the terminals: phase (L), neutral (N) and earth <u>+</u>.
- Check the seal on the gas and water pipe connections.
- We shall not accept any responsibility for any damage and disturbance arising from not following these instructions.

Only qualified professionals are authorised to work on the appliance and the installation.



Check regularly that the installation contains water and is pressurised.

Keep the appliance accessible at all times.

Avoid draining the installation.

The appliance should be on Summer or Antrifreeze mode rather than switched off to guarantee the following functions:

- Antifreeze protection
- Protection against corrosion on domestic hot water tanks fitted with a titanium anode

1.3 Liabilities

1.3.1 Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various applicable European Directives. They are therefore delivered with **CE** marking and all relevant documentation. In the interest of customers, we are continuously endeavouring to make improvements in product quality. All the specifications stated in this document are therefore subject to change without notice.

Our liability as the manufacturer may not be invoked in the following cases:

- Failure to abide by the instructions on installing the appliance
- Failure to abide by the instructions on using the appliance
- Faulty or insufficient maintenance of the appliance

1.3.2 Installer's liability

The installer is responsible for the installation and commissioning of the appliance. The installer is required to observe the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance
- Install the appliance in acordance with the legislation and standards currently in force
- Perform the initial start up and carry out any checks necessary
- Explain the installation to the user
- If a maintenance is necessary, warn the user of the obligation to check the appliance and maintain it in good working order
- Give all the instruction manuals to the user

1.3.3 User's liability

To guarantee optimum operation of the appliance, the user must respect the following instructions:

- Read and follow the instructions given in the manuals provided with the appliance
- Call on qualified professionals to carry out installation and initial start up
- Get your installer to explain your installation to you
- Ensure the Appliance is serviced in accordance with the manufacturer's instructions by a suitable qualified person
- Keep the instruction manuals in good condition close to the appliance

2 About this manual

2.1 Symbols used in the manual

🔨 Caution danger

Risk of injury and damage to equipment. Attention must be paid to the warnings on safety of persons and equipment.

Specific information Information must be kept in mind to maintain comfort.

2.2 Abbreviations

DHW: Domestic hot water

PCU: Primary Control Unit (Operating management electronics)

SU: Safety Unit (Safety electronics)

Reference

Refer to another manual or other pages in this instruction manual.

PSU: Parameter Storage Unit (Boiler parameter storage)

CCE: Leak proofing system

3.1 General description

The C 230 ECO boiler is a gas fired condensing boiler.

The cast aluminium-silicium heat exchanger is designed for the recuperation of the sensible and latent heat in combusted gases.

This watertight combustion circuit boiler can be used in a forced flue version. Installation with air intake from the premises is also possible.

The burner and the combustive air inlet fan are very quiet.

Gas and combustive air is supplied via the upper part of the boiler. Underneath the boiler is a condensates collector in composite material and a siphon to evacuate condensates, located on the side.

The flow temperature can be set between 20°C and 90°C (Factory setting: 80 °C).

The C 230 ECO boiler is fitted with a low water safety system based on divergence and rise in temperature readings.

Output may modulate between $18\%^{(1)}$ and 100% depending on the heating requirement. The boilers can be fitted with a **DIEMATIC-** $m3^{(2)}$ electronic control panel which is factory set to include priority domestic hot water production and a control system which operates according to the outside temperature.

The DIEMATIC-m3 control panel with built-in regulator controls automatic operation of heating as a function of:

- The outside temperature.
- The ambient temperature when the remote control (as an option) is connected.

The K3 control panel is fitted only in association with a boiler fitted with a DIEMATIC-m3 control panel as part of a cascade installation.

DHW regulation and programming is handled by the DIEMATIC-m3 control panel on the master boiler.

The regulator also provides antifreeze protection for the installation and the environment, if the home is empty, for a period that may be programmed one year in advance and lasting for up to 99 days.

- (1) Depending on the boiler type
- (2) or K3 control panel for the secondary boiler(s)

3.2 Technical specifications

C 230 ECO		Unit	85	130	170	210
General						
Number of sections			3	4	5	6
Burner operation				Modu	lating	
Lipsful output (20/60°C) DNL (C20)	minimum	kW	16	22	29	39
	maximum	kW	87	113 ⁽¹⁾ /120	166	200
Lipsful output (50/20°C) DN (C20)	minimum	kW	18	24	33	44
	maximum	kW	93	121 ⁽¹⁾ /129	179	217
	minimum	kW	17	23	31	41
Burner output (HI) (G20) (Power Input)	maximum	kW	89	115 ⁽¹⁾ /123	170	205
Combustion gas and by-products						
Gas supply pressure G20		mbar		17 -	- 30	
Gas flow rate G20 (15 °C - 1013 mbar)	minimum	m ³ /h	1.8	2.4	3.3	4.3
	maximum	m ³ /h	9.4	12.2 ⁽¹⁾ /13	18	21.7
Gas flow rate G25 (15 °C - 1013 mbar)	minimum	m ³ /h	2.1	2.8	3.8	5.0
	maximum	m ³ /h	11	14.4	20.9	25.2
Gas flow rate G27 (15 °C - 1013 mbar)	minimum	m ³ /h	2.2	3.0	4.0	-
	maximum	m ³ /h	11.5	15.9	22.0	-
Gas flow rate G31	minimum	Kg/h	1.94	1.94	3.42	3.19
	maximum	Kg/h	6.91	9.56	13.21	15.93
CO ₂ (G20-G25) QminQmax (Open air box)		%	9.3-8.8	9.3-8.8	9.3-8.8	9.3-8.8
CO ₂ (G20-G25) QminQmax (Closed air box)		%	9.5-9.0	9.5-9.0	9.5-9.0	9.5-9.0
CO ₂ (G27) QminQmax (Open air box)		%	9.3-8.8	9.3-8.8	9.3-8.8	-
CO ₂ (G27) QminQmax (Closed air box)		%	9.5-9.0	9.5-9.0	9.5-9.0	-
CO ₂ (G31) QminQmax (Open air box)		%	10.5-9.8	10.5-9.8	10.5-9.8	10.5-9.8
CO ₂ (G31) QminQmax (Closed air box)		%	10.7-10.0	10.7-10.0	10.7-10.0	10.7-10.0
Average nitrogen oxide emission (NOx)		mg/kWh	62	54	49	58
Average CO emission		mg/kWh	19	15	16	19
Maximum residual fan duty for flue gas		Pa	130	130	130	130
	minimum	Kg/h	27.2	36.7	49.5	65.5
Combusted gas flow ⁽²⁾	maximum	Kg/h	149.7	193.5 ⁽¹⁾ / 206.9	286.0	344.9
Classification of type according to the discharge of combusted gases and air supply			B23, B23P, C13, C33, C43, C53, C63, C83			
Heating						
Safety temperature		°C	110			
Water setting range		°C	20 - 90			
Water pressure	minimum maximum	bar (MPa) bar (MPa)	0,8			
Water content			12	16	20	24
Water resistance at ΔT = 10K		mbar	660	540	680	720
Water resistance at ΔT = 20K		mbar	165	135	170	180
Electricity characteristics						·
Power supply voltage		V/Hz		230	/ 50	

C 230 ECO		Unit	85	130	170	210
Power consumption	minimum	W	34	36	56	59
	maximum	W	125	193	206	317
Insulation class		IP		2	1	
Miscellaneous						
Weight without water		kg	130	150	170	200
Acoustic level at 1 metre		dB(A)		≤ 57		≤ 63

(1) For Italy - Limiting input to 115 kW : See chapter: 5.4.5

(2) G20 - Gas H



- 1 Flue gas discharge duct
- 2 Measurement point O₂/CO₂ (Emplacement for fue gas sensor, Option)
- 3 Air enclosure
- 4 Control panel
- 5 Burner
- 6 Heat exchanger
- 7 Inspection hatch
- 8 Inspection cap / Cleaning
- 9 Ignition electrode / Ionization probe
- 10 Heating body sensor
- 11 Return sensor
- 12 Condensates collector
- 13 Condensate trap
- 14 Silencer
- 15 Filling and emptying tap
- 16 Circuit breaker
- 17 Multivalve gas unit
- 18 Venturi
- 19 Fan
- 20 Mixer pipe

- 21 Flue gas pressure switch
- 22 Output sensor
- 23 Connector for the programming tool
- 24 Gas connection
- 25 Return connection
- 26 Flow connection
- 27 Reset button
- 28 Display DIEMATIC-m3
- 29 Air inlet (Protective cage)
- 30 General ON () / OFF () switch

4 Operating the appliance

4.1 Control panel

4.1.1 DIEMATIC-m3 control panel

Electromechanical components



- 1. General ON () / OFF () switch
- 2. Reset button
- 3. Flap
- 4. Timed circuit breaker (4 A)
- 5. Connector for the programming tool
- 6. Display

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The panel must always be supplied with 230V voltage:

- to ensure the anti-grip of the heating pump,
- to ensure Titan Active System® operation when a titanium anode is protecting the DHW tank.

Furthermore, if an interactive remote control (CDI 2) is connected and the 1 switch is in the off \bigcirc position, there will be no display on the CDI 2.

See: "Control panel instructions"



1	Text and numerical display
2	Graphic display bar for the programme in circuit A, B or C
3	Light area: Reduced temperature heating period or tank load disabled
4	Dark area: Comfort temperature heating period or tank load enabled
5	Flashing cursor showing the current time
6	Number display (current time, adjusted values, parameters, etc.)
	Number of the boiler for which the parameters are displayed
7	Control panel instructions - See section 6.1: Access to the parameters of the secondary boilers (Control panel K3)
	in a cascade
8	The arrows flash when setting values can be modified using the + and - keys
9	Circuit operation symbols
ÌM	Opening the 3-way valve
	Closing the 3-way valve
	Displayed circuit pump on
ABC	Name of the circuit displayed
10	Arrows indicating the chosen time programme (P1, P2, P3 or P4) for the circuit displayed, A, B, C, or the activation of the manual summer mode
11	Symbols indicating that the following inputs/outputs are active
ĘĽ	DHW load pump on
Â	Summer mode (Automatic or Manual)
[®]	Burner on switch request





- 1. General ON () / OFF () switch
- 2. Reset button

- 3. Connector for the programming tool
- 4. Timed circuit breaker (4 A)

4.2.1 DIEMATIC-m3 control panel

• Keys accessible when the flap is closed



Adjustment keys

MODE	Various operating modes can be selected by successively pressing key MODE : AUTOMATIQUE						
	DAY 7/7: Forced operation at permanent Day temperature						
 DAY (Until midnight): Forced operation at temp temperature 							
	 NIGHT 7/7: Forced operation at permanent Night temperature 						
	 NIGHT (Until midnight): Forced operation at temporary Night temperature 						
	 DAYS ANTIFREEZ: Antifreeze mode for the number of days set 						
	► HOLIDAY7/7: Permanent antifreeze mode						
Ēŗ	Restart key for a DHW calorifier load AUTOMATIQUE						
	DHW: Restarts DHW load until midnight						
	DHW 7/7: DHW load is forced permanently						
	After a few seconds, the display disappears but the mode is activated.						
	Display key for the various counters (number of burner start-ups, number of burner operating hours, etc.)						
\$\$	Set temperatures Day (Heating / DHW / Pool)						
IC	Set temperatures Night (Heating / DHW)						
	Access key to the secondary boilers (Control panel K3) in a cascade						
×.	Setting the gradients for circuits A, B and C						
Í.	Setting the parallel offsets DECAL. // DEP.A , DECAL. // DEP.B or DECAL. // DEP.C for the heating curves on circuits A, B or C. If the Day setting for one of the circuits, A, B or C, is above 30°C, you no longer have access parallel offset on this circuit.						
+/-	Adjustment keys						

• Keys accessible when the flap is open



Adjustment keys						
¢₽	Enter (per 1/2 hour) the comfort temperature period or tank load enabled (dark area).					
Enter (per 1/2 hour) the reduced tempera period or tank load disabled (light area).						
	Simultaneously pressing the 2 keys, 💥 🌓 and					
STANDARD	(, resets all of the time programmes.					
Û	Return key					
1	Page scrolling					
	Line scrolling					
	Scroll of boilers connected					
Ą	Manual "Summer" shutdown key. The heating is switched off and DHW production is ensured.					
Å.	Fitter settings access key					
	Sweep key					

See Control panel instructions

4.2.2 K3 control panel

Make all settings on the master boiler fitted with a **DIEMATIC-m3** control panel Press the $a \square$ key.

- Access to the parameters of the secondary boilers (Control panel K3) in a cascade
- · Boiler temperature display on the master boiler



Number of the boiler for which the parameters are displayed

- ▶ Press the key
 - The number of the boiler displayed corresponds to the setting on the coding wheel.

Adjustme nt (Code wheel)	Number of the boiler for which the parameters are displayed				
0	1	Master boiler (DIEMATIC-m3 control panel)			
1	2	Secondary boiler (K3 control panel)			
2	3	Secondary boiler (K3 control panel)			
etc.					



	10 12 14	
BOILER TE	EMP.	43.30 2
(🕬)(🕞 A 📍))
		
		1

Number of the boiler for which the parameters are displayed

All parameters and measurements on the secondary boilers (Control panel K3) can be accessed with the control panel keys DIEMATIC-m3.

Key A_{\Box} is used to transmit all information from the secondary boilers (Control Panel K3) to the master boiler (DIEMATIC-m3 Control Panel).

The parameters on the secondary boilers can be read on the control panel display DIEMATIC-m3.

If no keys are pressed for 10 seconds, the control panel display returns to the master boiler (Number 1).

Switching off the boiler 4.3

- Cut the power supply to the boiler.
- Close the gas valve.

4.3.1 Precautions to take if there is a danger of frost

Heating circuit:

Use a correctly dosed antifreeze to prevent the heating water freezing. If this cannot be done, drain the system completely. In all cases, consult the fitter.

4.3.2 Precautions required in the case of long boiler stops

- Close the gas valve
- The boiler and the chimney must be swept carefully.

Commissioning the boiler 4.4

Initial commissioning must be done by a qualified professional.

4.4.1 Commissioning

- Ensure that the boiler is switched off
- Remove the front casing
- Open the main gas supply
- Open the boiler control panel (Control panel instructions)
- Check the electrical connection
- Fill the installation with water and check hydraulic tightness (Pmin: 0.8 bar)
- Vent the heating installation
- Fill the condensates siphon with water
- Check the connection of the combusted gas evacuation and the air inlet

- Empty the gas inlet
- Open the gas valve on the gas pipe to the boiler
- Check the gas connection
- Turn the boiler on

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- Turn the main switch to ①
- The boiler type is displayed on the screen for 5 seconds
- Provoke a heating request
- The boiler starts to operate
- Check the settings (See "Gas settings" Installation and Service -Manual). If necessary, correct the settings

- Close the door of the boiler to prevent the internal circulation of air.

Checking and maintenance 5

The boiler is almost maintenance-free if it is set correctly. The boiler only requires an annual check and cleaning if necessary.

Make the following checks at least 1 time a year:

- Checking the combustion in the boiler
- Setting the ignition electrode
- Checking tightness (hydraulics, combusted gas discharge and gas)
- Checking the hydraulic pressure

Carry out the following maintenance at least 1 time a year:

- Clean the fan
- Clean the heat exchanger using the tool provided
- Clean the burner
- Clean the siphon.

Don't forget the risk of frost.

Domestic hot water circuit: Drain the domestic water tank and pipes.

6 Troubleshooting

6.1 Type plate



6.2.1 Messages

Message	Code no.	Probable causes	Action
SHOW REM.CTRL		The message SHOW REM.CTRL indicates the presence of an override on a remote control	To cancel the overrides on all remote controls, press the AUTO key for 5 seconds
REVISION		Boiler service required	Contact the professional responsible for maintenance of the boiler
BL.PSU ERROR	0	Error parameters	 Switch the boiler off and switch back on Set the boiler type parameter (See #CONFIGURATION)
BL.BOILER MAX	1	Boiler temperature > 110 °C	Wait 10 minutes for the temperature to come down
BL.EXCH.MAX	3	Heat exchanger temperature > 95 °C	 Wait 10 minutes for the temperature to come down Check the water flow Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled
BL.CS OPEN	4	The speed at which the exchanger temperature is rising is too high	 Wait 10 minutes for the temperature to come down Check the water flow Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled
BL.DT EXCH.BACK	5	The temperature difference between the exchanger sensor and the return sensor is too great (35 K)	 Wait 10 minutes for the temperature to come down Check the water flow Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled
BL.DT BOI.EXC.	6	The temperature difference between the boiler sensor and the exchanger sensor is too great	 Wait 10 minutes for the temperature to come down Check the water flow Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled
BL.RL OPEN	8	The RL inlet on the PCU is open	 Switch the boiler off and switch back on Set the boiler type parameter (See #CONFIGURATION)
BL.INV.L/N	9	 Phase and neutral inverted Mains electricity with floating or two-phase neutral 	 Respect the rating plate on the connection terminal block Set the boiler type parameter (See #CONFIGURATION)
BL.CS OPEN	11	The contact inlet CS is open	Check the cause of the open contact CS
BL.COM PCU-M3	13	Communication breakdown between PCU and DIEMATIC-m3	Check the link and the connectors
BL.GAS PRESS	15	Gas pressure too low	Check: - Opening the gas valve on the boiler - Gas supply pressure - Correct installation of the pressure switch (Replace if necessary)
BL.BAD SU	16	The SU is not compatible with the PCU	 Switch the boiler off and switch back on SU: Change them
BL.BAD PSU	17	Error parameters	Switch the boiler off and switch back onPCU: Change them
BL.BAD PSU	18	The PSU is not compatible with the PCU	 Switch the boiler off and switch back on PSU: Change them Set the boiler type parameter

Message	Code no.	Probable causes	Action
BL.COM SU	21	Communication breakdown between PCU and SU	Check the installation of the SU on the PCU
BL.FLAME LOS	22	Flame lost	 Wait 10 seconds If, after 5 attempts, the error persists, BL.FLAME LOS changes to I-CURRENT FAIL Check: Opening the gas valve on the boiler Gas pressure Setting the gas valve unit Check the connection of the combusted gas evacuation and the air inlet Checking the heat exchanger
BL.CCE TEST	24	The cyclical leak proofing kit (CCE) has detected a problem	 Wait 10 seconds If, after 5 attempts, the error persists, BL.CCE TEST changes to CCE TEST FAIL Check: Opening the gas valve on the boiler Gas pressure Correct installation of the pressure switch handling the CCE function (Replace if necessary) Gas valve (Replace if necessary) Wiring
BL.SU ERROR	25	SU: Internal error	Wait 10 secondsSU: Change them
BL.UNKNOWN	254	Blockage unknown	Switch the boiler off and switch back onSU: Change them

Messages are not memorised.

6.2.2 Faults

Faults	Code no.	Probable causes	Action		
	32	The boiler sensor is short circuited	- Reset the box		
BOILER S.FAIL.	33	The boiler sensor is off	 Check the link and the connectors Replace the sensor if necessary 		
	6	The return sensor is short circuited	- Reset the box		
BACK S.FAILURE	7	The return sensor is off	Check the link and the connectors Benlace the sensor if necessary		
	8	The sensor reading is under -10°C			
	2	The exchanger sensor is short circuited	- Reset the box		
EXCHAN.S.FAIL	3	The exchanger sensor is off	- Check the link and the connectors		
	4	The sensor reading is under -10°C	······		
OUTSI. S.FAIL.					
DHW S. FAILURE					
AUX1.SENS.FAIL					
AUX2.SENS.FAIL					
UNIV.SENS.FAIL					
OUTL S.A FAIL.					
OUTL S.B FAIL.			Check the link and the connectors. Replace the sensor if necessary. See comments below.		
OUTL S.C FAIL.					
ROOM S.A FAIL.		The corresponding sensor is off or short- circuited.			
ROOM S.B FAIL.					
ROOM S.C FAIL.					
SWIM.A S.FAIL					
SWIM.B S.FAIL					
SWIM.C S.FAIL					
SOLAR S.FAIL					
ST.TANK S.FAIL					
DHW 2 S. FAIL					
BOILER 2 FAIL.					
BOILER 3 FAIL.					
BOILER 4 FAIL.					
BOILER 5 FAIL.					
BOILER 6 FAIL.		Error on a secondary boiler, in a cascade	Press key 🖧 ito see the error.		
BOILER 7 FAIL.		Installation.			
BOILER 8 FAIL.					
BOILER 9 FAIL					
BOILER 10 FAIL					
		The Titan Active System® is short-	Check that the Titan Active System® is not short-		
TA-S SHORT-CIR		circuited.	circuited.		
TA-S DISCONNEC		The Titan Active System® is on an open circuit.	Check that the Titan Active System® is correctly connected.		

Faults	Code no.	Probable causes	Action
TA-S FAILURE		Internal problem.	 Switch off the current. Contact the professional responsible for maintenance of the boiler.
PSU FAIL	0	PSU not connected or faulty	 Reset the box Check the link and the connectors PSU: Replace if necessary
PSU PARAM FAIL	1	Safety parameter errors	 Reset the box Check the link and the connectors PSU: Replace if necessary
STB EXCHANGE	5	Exchanger temperature too high	 Reset the box Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled
STB BACK	9	Return temperature too high	 Reset the box Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled
EXCH-BACK <min< th=""><th>10</th><th> The temperature difference between the exchanger sensor and the boiler flow sensor is too little Sensor defective No flow rate or flow rate too low Sensor installed incorrectly </th><th> Reset the box Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled Sensor installed correctly Level differences on the temperature sensors </th></min<>	10	 The temperature difference between the exchanger sensor and the boiler flow sensor is too little Sensor defective No flow rate or flow rate too low Sensor installed incorrectly 	 Reset the box Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled Sensor installed correctly Level differences on the temperature sensors
EXCH-BACK>MAX	11	 The temperature difference between the exchanger sensor and the boiler flow sensor is too great Sensor defective No flow rate or flow rate too low Sensor installed incorrectly 	 Reset the box Check that the installation and boiler are adequately filled with water and correctly irrigated and bled Check: Heat exchanger fouled Sensor installed correctly Level differences on the temperature sensors
SMOKE PRE.FAIL	12	 The flue gas pressure switch is open Bad connection The pressure in the combusted gases evacuation duct is too high 	 Reset the box Check the wiring Ensure that the siphon is not empty. Top up with more water if necessary It is possible that the combustion products evacuation pipe is totally or partially obstructed Check: Open flue damper

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Faults	Code no.	Probable causes	Action
		 No flame after 5 ignition attempts No ignition spark 	 Reset the box Check the correct connection of the ignition cable and that there is no breakdown or short circuit on the earth Check:
BURNER FAILURE	14		 the gap between the electrodes (3 to 4 mm) Burner cover status (Burner / electrode cover closed) Faulty control by the SU board
		 No flame after 5 ignition attempts No flame 	 Reset the box First check that the gas valve is open, that the gas supply pressure is present, that the gas conduit has been sufficiently bled, that the air/flue gas conduit is not blocked and is not leaking, that the siphon is full and not blocked The gas valve unit must be set with precaution Gas block: Wiring OK Faulty control by the SU board
		 No flame after 5 ignition attempts Flame present (insufficient ionization) 	Check the correct connection of the ignition cable and that there is no breakdown or short circuit on the earth
			Check: Check the electrode condition Opening the gas valve on the boiler Gas supply pressure
		 The cyclical leak proofing kit (CCE) has detected a leak 	- Reset the box Check:
CCE.TST.FAIL	15		 Opening the gas valve on the boiler Gas supply pressure Replace the gas valve (If necessary)
PARASIT FLAME	16	Detection of a parasite flame	 Reset the box Check: Ignition/ionization electrode Leak on the gas valve Gas inlet valve closed (Compulsory)
VALVE FAIL	17	Gas valve defect	 Reset the box Check the link and the connectors Check the gas valve and replace if necessary
FAN FAILURE	34	The fan is not running at the right speed	 Reset the box Check: Cabling error Fan error
BACK>BOIL FAIL	35	The return temperature is higher than the boiler temperature	 Reset the box Check the water circulation direction in the boiler Check that the boiler sensor and the return sensor have not been reversed
I-CURRENT FAIL	36	The flame went out more than 5 times in 24 hours while the burner was operating	- Reset the box Check: - Gas supply pressure - Pressure regulator - Setting the gas valve unit
SU COM.FAIL	37	Communication breakdown between PCU and SU	 Reset the box Check the installation of the SU on the PCU
PCU-M3 COM.FAIL	38	Communication breakdown between PCU and DIEMATIC-m3	Reset the boxCheck the link and the connectors

Faults	Code no.	Probable causes	Action
CS OPEN FAIL	39	The contact inlet CS is open	 Check the cause of the open contact CS Reset the box
FAIL UNKNOWN	254	Fault unknown	 Switch the boiler off and switch back on SU: Change them
PCU COM. FAIL		Communication breakdown between DIEMATIC-m3 and PCU	 Reset the box Check the link and the connectors Switch the boiler off and switch back on
5 RESET:ON/OFF		5 resets done in less than an hour	 Switch the boiler off and switch back on. The current error is displayed and can be reset
MC COM.FAIL		Communication error between DIEMATIC M3 and the boiler module for the CDI radio (CDR)	 Check the link between the DIEMATIC M3 and the boiler module

Remarks	
OUTSI. S.FAIL.	The boiler operates on BOILER MAX temperature
	 The valve setting is no longer ensured but monitoring the maximum temperature of the circuit after the valve is ensured. Valves may be manually operated. Reheating the domestic hot water remains ensured.
DHW S. FAILURE	The hot water storage tank reheating operation is no longer assured.
OUTL S.A FAIL., OUTL S.B FAIL. and OUTL S.C FAIL.	The circuit concerned goes from automatic to manual mode: The pump operates.
ROOM S.A FAIL., ROOM S.B FAIL. and ROOM S.C FAIL.	The circuit concerned operates without any influence from the room sensor.
SWIM.A S.FAIL, SWIM.B S.FAIL, SWIM.C S.FAIL	Pool reheating is independent of its temperature.
SOLAR S.FAIL	Reheating domestic hot water using the solar panel is no longer ensured.
ST.TANK S.FAIL	The hot water storage tank reheating operation is no longer assured.
TAS	Domestic hot water production is shut down and can be restarted using key
	The tank is no longer protected. Contact the professional responsible for maintenance of the boiler.
	A tank without Titan Active System® is connected to the boiler: Check that the Titan Active System® simulation connector (delivered with package AD212) is fitted to the sensor card."
•	

1 The last ten failures are memorised in the paragraph **#DEF. HISTORY**

See: "Parameter and input/output check (mode tests) - Control panel instructions

7 Energy savings

Here are a few tips for saving energy:

- Install reflector panels behind the radiators.
- Do not cover the radiators. Do not hang curtains in front of the radiators.
- Insulate pipes to prevent thermal losses and condensation.
- Do not obstruct aeration grates (even partially). They help to reduce humidity in the home. The more humid a home, the more heating it consumes.
- Turn heating off when airing a room (5 minutes a day is sufficient) Avoid deregulating the thermostat. Switch the On/Off switch to Off.
- Do not shut down heating completely if you are absent. Lower the thermostat by 3-4°C.
- Use the sun's heat as much as possible.
- Take showers rather than baths. Use a water-saving shower head.

Warranty

You have just purchased one of our appliances and we thank you for the trust you have placed in our products. Please note that your appliance will provide good service for a longer period of time if it is regularly checked and maintained. Your fitter and our customer support network are at your disposal at all times.

Warranty terms

Starting from the purchase date shown on the original fitter's invoice, your appliance has a contractual guarantee against any manufacturing defect.

The length of the guarantee is mentioned in the price catalogue.

The manufacturer is not liable for any improper use of the appliance or failure to maintain or install the unit correctly (the user shall take care to ensure that the system is installed by a qualified fitter). In particular, the manufacturer shall not be held responsible for any damage, loss or injury caused by installations which do not comply with the following:

- applicable local laws and regulations
- specific requirements relating to the installation, such as national and/or local regulations
- the manufacturer's instructions, in particular those relating to the regular maintenance of the unit
- the rules of the profession

The warranty is limited to the exchange or repair of such parts as have been recognised to be faulty by our technical department and does not cover labour, travel and carriage costs. The warranty shall not apply to the replacement or repair of parts damaged by normal wear and tear, negligence, repairs by unqualified parties, faulty or insufficient monitoring and maintenance, faulty power supply or the use of unsuitable fuel. Sub-assemblies such as motors, pumps, electric valves etc. are guaranteed only if they have never been dismantled.

■ France

The preceding dispositions are not exclusive of benefits for the purchaser of the legal guarantee as stated in Civil Code articles 1641 to 1648.

Poland

Warranty conditions are included in the warranty card.

Switzerland

The application of the warranty is subject to the terms and conditions of sale, delivery and warranty of the company marketing our products.

Belgium

The preceding dispositions about the contractual guarantee are not exclusive of profit if the need arises for the purchaser in Belgium of the applicable legal dispositions on hidden defects.

Italy

The duration of our warranty is shown on the certificate delivered with the appliance.

Our liability as manufacturer may not be invoked in respect of incorrect use of the appliance, incorrect or insufficient maintenance thereof, or incorrect installation of the appliance (you must therefore ensure that installation and maintenance operations are carried out respectively by a qualified professional and by an after sales service company).

The legislation laid down by European Directive 99/44/EEC, transposed by Legislative Decree No. 24 of 2 February 2002 published in O.J. No. 57 of 8 March 2002, continues to apply.

Russia

The foregoing provisions in no way affect the rights of the consumer, which are guaranteed by the legislation of the Russian Federation as regards hidden defects.

The terms and conditions of warranty and the terms and conditions of application of the warranty are indicated on the warranty form.

The warranty shall not apply as regards the replacement or repair of wearing parts under normal use. Such parts include thermocouples, injection nozzles, flame control and ignition systems, fuses and gaskets.

Turkey

Due to the laws and regulations the product life for this product is 10 years. During that time the producer and/or the distributor has to provide after sales services and spare parts.

Other countries

The above provisions do not restrict the benefit of the legal laws regarding hidden defects applicable in the buyer's country.

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Subject to alterations.

30/11/2015



