

# Daxom

Electric Combi Boiler With Inbuilt Cylinder

COMFORT AND CONFIDENCE

C€



Tecnical S	pecifica	tions		
Model	Power (kW)		eight Without Water (kg)	
3~400 V, 50 Hz				
UKDAX-10EBT	10		50,0	
UKDAX-12EBT	12		50,0	
UKDAX-16EBT	16		52,0	
UKDAX-18EBT	18		52,0	
UKDAX-20EBT	20		52,0	
UKDAX-24EBT	24		52,0	
1~220 V, 50 Hz				
UKDAX-6EBM	6		50,0	
UKDAX-10EBM	10		50,0	
UKDAX-12EBM	12		50,0	
UKDAX-16EBM	16		52,0	
UKDAX-18EBM	18		52,0	
Tecnical Specification	ns	Heatin	g DHW	

OKDAK-TOLDINI	10		52,0	
Tecnical Specification	He	ating	DHW	
Min. Operation Pressure	bar		1	-
Max. Operation Pressure			3	8
Min. Temp. Setting			10	35
Max. Temp. Setting	°C		80	65
Connections			3/4	1/2
Dimensions (L*W*H)	mm	770*560*390		

Dear Daxom User, For correct operation and safety of this device, follow the instructions in this manual during installation and use. Unauthorised assembly or maintenance of this device will void the warranty, and our company will not be responsible for any defects or accidents that may occur with the product. Please keep this instruction manual in good condition for future reference.

#### 1. SAFETY WARNINGS

- 1. The boiler must be installed by qualified tradespeople (electrician/plumber) according to the instructions in this manual.
- 2. The boiler must initially be started up by a qualified technician, do not attempt to start the device yourself.
- 3. The boiler must be safely and securely connected to the water and heating system .
- 4. Ensure that the mains voltage is correct. (Please note: Depending on the model, the voltage specified may differ)
- 5. If using an external electricity source ( (such as a generator) safe operation of the boiler must be ensured.
- 6. Install the appliance with the appropriate diameter cable specified in this manual. The boiler needs to be connected via a MCB/RCD as outlined in this instruction manual and secure earth grounding needs to be in place for safe operation.
- 7. This appliance should not be installed in humid or external environments.
- 8. Do not store flammable or explosive substances or articles near the appliance.

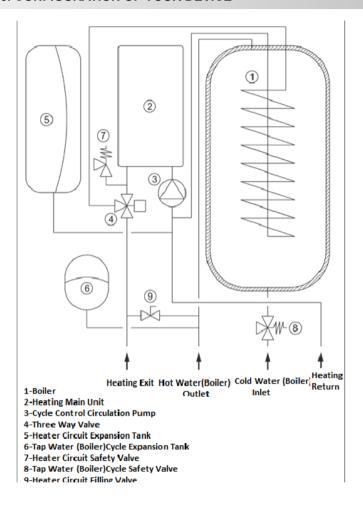
- 9. This installation and operating manual is part of the product. Keep it for reference.
- 10. This boiler should only be used for its intended purpose. The manufacturer rejects all contractual or non-contractual obligations in advance for damage to property or injury to persons or animals resulting from misuse, installation, adjustment and maintenance.
- 11.After removing the packaging, make sure all parts are included and in good condition. If parts are missing or damaged, contact the retailer where you purchased your boiler.
- 12. The safety valve outlet must be connected to the appropriate drain and ventilation system. The manufacturer disclaims all liability in the event of damage caused by any intervention to the safety valve.
- 13. Carefully dispose of all packaging.
- 14. In case of water leakage, the water supply must be switched off and the manufacturer needs to be immediately informed.
- 15. The operating pressure of the hydraulic system must be between 1 and 2 bars and therefore must not exceed 3 bars. If necessary, the pressure may be reset as shown in the paragraph "Filling the System".

- 16. The Mg-Anode rod inside the enamel coated cylinder provides corrosion resistance. Check the Mg-Anode rod every three years and replace it if necessary.
- 17. The domestic water network pressure can be up to 6 bar. If the mains pressure exceeds 6 bar, water is automatically discharged from the safety valve. If the mains pressure is above 6 bar, a pressure reducer must be installed at the device or incoming water supply.
- 18. The anti-Legionella function increases the Cylinders temperature to 65 °C once a day to provide hygienic water.
- 19. If the boiler is not going to be used for a long time, it is recommended to perform the following steps:
- Turn off the power switch
- Drain the water in both the heating and hot water circuits, and close off the taps to prevent freezing.
- 20. The boiler should not be used by children without supervision.
- 21.In case of a smoke or burn smell originating from the device, turn off the power switch and contact the manufacturer.
- 22. Do not touch the device with wet hands or when the outside of the device is wet.
- 23.Do not use chemicals such as detergents or thinners for cleaning the boiler. Turn off power to the appliance, and then clean the exterior of the appliance with a slightly damp cloth.
- 24. The first time you turn on the hot water tap, the water coming out may be of a very high temperature. Please take care and check the water temperature.

#### 2. RECOMMENDATIONS FOR ECONOMICAL USE

- 1. Adjust the indoor temperature settings to your needs.
- 2. Having the heating operation set according to your intended use will increase energy savings.
- 3. Savings can be made by adjusting the required temperature value for each section (of the property with thermostatic radiator valves), However, simultaneous use of a room thermostat and thermostatic valves may cause problems.
- 4. It is important to position the room thermostat away from objects, such as curtains, articles, etc., which could disrupt the ambient airflow. This will ensure that the device can correctly detect the temperature.
- 5. The room thermostat should be located at a suitable height and away from the Boiler and other devices that would affect detection of the actual ambient temperature.
- 6. Long-term ventilation of the heated environments will increases energy loss. Short-term ventilation should be provided. If long-term ventilation is required, closing the radiator valves or reducing the device temperature setting saves energy.
- 7. Setting the boiler to a lower temperature overnight or when not at home will save energy while maintaining the ambient temperature.
- 8. Setting the operating temperature of the device according to the outside temperature saves energy.
- 9. Setting domestic water temperature to a moderate level saves energy.

#### 3. CONFIGURATION OF YOUR DEVICE



#### 4. TECHNICAL INFORMATION

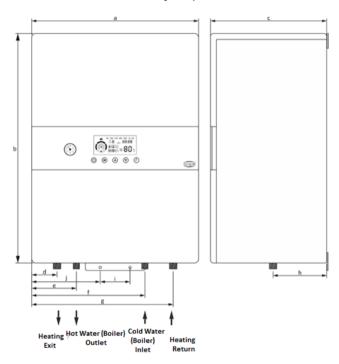
Your device has a 50 litre integrated enamelled cylinder. From start up to 65° C DHW will take 10 minutes. During the use of DHW the cylinder continuous heating, providing continuous hot water even at very low water pressure and flows.

Technical Specifications					
Model	Model Power (kW) Wa		Boiler Volume (I)		
3~400 V 50	Hz Electrical Bo	oiler With Cylin	der		
UKDAX-10EBT	10	50			
UKDAX-12EBT	12	50			
UKDAX-16EBT	16	52	50		
UKDAX-18EBT	18	52	50		
UKDAX-20EBT	20	52			
UKDAX-24EBT	24	52			
1~220 V 50	1~220 V 50 Hz Electrical Boiler With Cylinder				
UKDAX-6EDM	6	50			
UKDAX-10EDM	10	50			
UKDAX-12EDM	12	50	50		
UKDAX-16EDM	16	16 52			
UKDAX-18EDM	18 52				

Technical Specification	ons	Heating	Tap Water	
Min. Operation Pressure	bar	1	-	
Max Operation Pressure	bar	3	6	
Min. Setting Temperature	°C	35	30	
Max. Setting Temperature	°C	80	65	
Connections	inc h	3/4	1/2	
Dimensions	m m	770*560*390		

### 5. BOILER ASSEMBLY

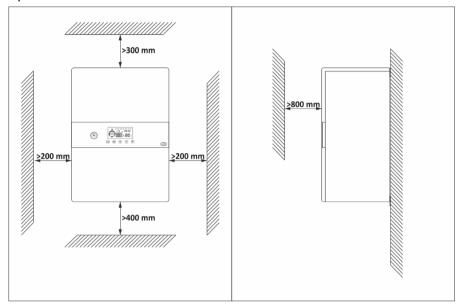
riangle The boiler must be installed by a qualified technician.



Туре	а	b	С	d	e	f	g	h	i	j
Measurement	770	560	390	85	150	380	475	180	100	230

# 5.1 Installation requirements and safety instructions

For ease of maintenance, observe the minimum distances specified in the installation in order to access the boiler.



For correct device positioning:

- Do not place above a stove hob or similar cooking appliances.
- Do not leave flammable products in the room where the boiler is installed
- Heat-sensitive walls (eg wooden walls) need proper insulation. Insulation must be installed between the wall and boiler.
- Before installation, carefully flush all system piping to remove any debris that may interfere with the operation of the boiler. In case of leakage due to overpressure of the heating system, place a water collection funnel with a suitable drain pipe under the safety valve. There is no need for a safety valve in the

mains hot water circuit, but make sure that the water system does not exceed 6 bars. If in doubt, have a pressure reducer installed.

- The area where the boiler is installed must be free of obstructions and protrusions during repair or maintenance.
- The electrical connection of the boiler must be made with suitable cables, MCB/RCD and grounding must be installed.
- The wall on which your device is mounted must be strong enough to bear the weight of the device.

### 5.2. Wall Mounting of the Boiler

The appliance must be installed exclusively on a vertical and solid wall that can support the weight of the boiler. M8 screws with appropriate anchors conforming to the type of the wall itself are recommended.

### 5.2.1. Heating and Plumbing Connections

Pipe of appropriate diameter to ensure adequate circulation of the heating water must be used during installation. If the correct diameter heating pipes are not used, constriction or blockages in the installation may result in insufficient heating circulation. Connections to the boiler should be easily detachable if necessary. Non return Valves should be used with the inlet pipes. Separate shut-off valves should be used at the inlet and outlet of the heating circuit. A reducer valve should be used at the boiler cold water inlet.

### 5.2.1.1. Filling the Boiler

After installation, the boiler must be filled first. This should be done following the instructions below.

Open the cold water inlet tap.

Open any tap (preferably the closest tap) connected to the hot water outlet of the appliance. The air in the boiler will be discharged from this tap.

Close the tap after the air has been discharged from the tap and water has started to flow continuously.

Water leakage should be checked carefully.

### 5.2.1.2. Filling the Heating System

The filling is done with the blue filling tap under the device. This should be done following the instructions below.

Make sure the cold water inlet tap is open.

Open the filling tap until the water pressure gauge is between 1 and 1.5 bar.

When the filling is complete, close the filling tap.

Discharge air accumulated in the radiators.

- Heating water pressure should be checked to make sure that it is between 1 and 1.5 bar after discharging the air in the radiators.
- Check to ensure there is no water leakage.

#### 5.2.2. The Electrical Connections

The electrical installation must be carried out by a qualified electrician using suitable diameter cable determined according to the boiler capacity and cable length. The MCB and RCD with appropriate characteristics and amperage which can cut the boiler electricity completely should be located separately and be close to the device. If there is no earthing installation in the structure where the boiler is installed, the grounding line for the boiler should be installed by a qualified electrician. The Isolator switch must be located near the boiler, and after the Isolator switch there must be enough cable to connect to the boiler. The connection of the cables to the boiler must be done by a qualified installer. Cable diameters calculated according to boiler capacity and cable lengths, and MCB and RCD amperage values can be seen in the table below.

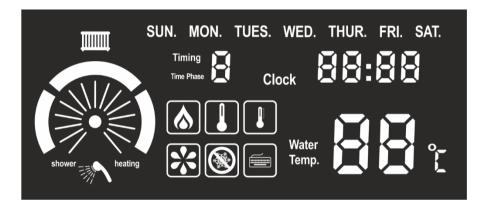
Model	Pow er (kW)	Phase & Voltage (V)	Current (A)	Fuse & Residual Current Device (A)	Cable Section (mm)
UKDAX-10EBT	10	3~400	3*15,2	3*20	5*2,5
UKDAX-12EBT	12	3~400	3*18,2	3*20	5*2,5
UKDAX-16EBT	16	3~400	3*24,3	3*25	5*4
UKDAX-18EBT	18	3~400	3*27,3	3*32	5*4
UKDAX-20EBT	20	3~400	3*30,4	3*40	5*6
UKDAX-24EBT	24	3~400	3*36,4	3*50	5*6
UKDAX-6EBM	6	1~220	27,3	32	3*4
UKDAX-10EBM	10	1~220	45,6	50	3*6
UKDAX-12EBM	12	1~220	54,6	63	3*10
UKDAX-16EBM	16	1~220	72,8	80	3*16
UKDAX-18EBM	18	1~220	81,9	100	3*16

⚠ Cable cross sections are calculated for a maximum of 10 m. For cable lengths of more than 10 m, consult your electrician.

#### 6. STARTING AND USING THE BOILER

#### 6.1. Control Screen

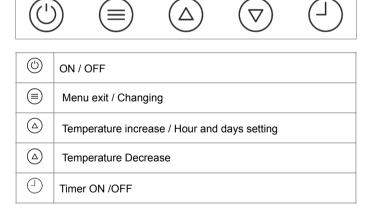
The operating status of the device can be viewed on the control panel.



	Radiator / floor heating indicator
SUN.	Days of the Week
Timing Time Phase	Time Programs for seven days
12:00	Hour
$\cap$	Capacity Indicator

**	Ready To Operation Indicator
₩ <b>^</b>	Tap Water (cylinder) heating indicator
<b>&amp;</b>	Heating indicator
	No need to for heating indicator
•	Exit / Return temperature difference indicator.
*	Pump operation indicator
8	Freezing Prevention Indicator
	Room Thermostad indicator
Water BB c	Temperature Indicator

### 6.2. Control Keys



## 6.3. Operating the Device

⚠ The boiler installation must be carried out by qualified tradespeople.

⚠ Our company is not responsible for the damages and accidents that may occur due to installation by unauthorised tradespeople. Before starting the boiler, all mechanical and electrical connections must be checked. During installation, the Combi boiler should be filled with water at a pressure between 1 to 2 bar. Our company is not responsible for damages and accidents that may occur due to incorrect connection. To start the boiler: Make sure that the water and heating valves are open.

Open the residual current relay and then the fuse.

After all the icons appear on the screen for a few seconds, the screen will look like this.



Press and hold for 2-3 seconds to switch on the device.



If the operating mode before the device was switched off was set to domestic water (DHW) and heating, the DHW cylinder will operate if the DHW temperature is below the set temperature. The symbols "heating" and "shower" appear, and the symbols are flashing. If the DHW temperature is equal to or above the set temperature, the appliance starts to operate for heating, and the icon appears.



If the operating mode before the device was switched off is set to domestic water (DHW) heating, the DHW cylinder will operate if the DHW temperature is below the set temperature. The "shower" icons appears and flashes. If the DHW temperature is equal to or above the set temperature, the unit switches to standby.



If the operating mode before the appliance was switched off was set to heating, the appliance operates for heating. The "Heating" icons appears.



A warning tone sounds each time you press a key. If the button is pressed for a long time (eg 2-3 seconds), the button can not be pressed again until you hear a beep.

### 6.4. Setting Operating Parameters

#### 6.4.1. Setting the Day and Time

The device is switched off.



The (a) key is held for 5-6 seconds, the days starts flashing

The day is set by pressing the riangle or riangle key a second apart.





The key is pressed, the hour digits start to flash.



Set the time between 0 and 23 by pressing the riangle or riangle key one second apart.



The is pressed, the minute digits start flashing.



Set to 0 to 60 minutes by pressing the  $^{ ext{$\triangle$}}$  or key  $^{ ext{$\nabla$}}$  one second apart.



Press the (b) key to save the settings. If no key is pressed for 10 seconds the device does exit the setup menu.



### 6.4.2. Heating Temperature Adjustment

Heating temperature adjustment; The and licons are displayed while the appliance is operating for heating, press or to set the temperature between 35° C and 80° C. Water Temp is not displayed while the heating temperature setting is made. The set temperature starts to flash. In order to set the heating temperature when the boiler is operating for domestic water, the operating mode of the device must be changed to heating. At the end of the operation, the device must be returned to the previous operating position. (See 6.4.8)



The display shows first the set operating temperature, then the actual temperature 20 seconds after the setting is completed. It may take time for the device to reach the set temperature. The heating does not start until the cylinder heating (DHW) is completed.



### 6.4.3. Adjusting the Domestic Water (Cylinder) Temperature

Domestic water (cylinder) temperature setting;

The temperature can be set between 30° C and 65° C while the and icons are displayed, the symbol is flashing. When the appliance is operating for domestic hot water (DHW). If the operating mode is set to domestic water (DHW) heating press the or key to adjust the temperature. It is also possible to change the domestic water (DHW) temperature during standby. To set the domestic hot water (DHW) temperature when operating for heating only, the operating mode of the device must be changed to domestic water (DHW). At the end of the operation, the device must be returned to the previous operating position. (See 6.4.8)



The display shows first the set operating temperature, then the actual temperature 20 seconds after the setting is completed. It may take time for the device to reach the set temperature.



⚠ Cylinder heating always takes priority. The appliance works for heating after the DHW cylinder has reached the set temperature. The Cylinder heating starts again when the selected temperature drops by 7 ° C.

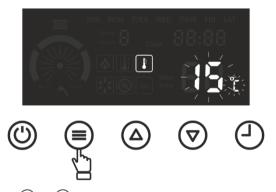
### 6.4.4. Setting the temperature difference

When the device enters the over temperature mode, we can set the temperature difference that we want it to operate in. When the device is in normal operating position;

Press the  $\ \ \ \ \ \$  button for 2-3 seconds to enter the setup menu.



The button is pressed one second at a time until the symbol appears, the temperature difference starts to flash.



Use the buttons  $\bigcirc$  or  $\bigcirc$  to adjust the temperature difference  $\Delta T$ .



Press (b) to exit the setup menu.



## 6.4.5. Room Thermostat Connection

The boiler can be controlled with the room thermostat so that the boiler operates according to the temperature settings on the room thermostat. The room thermostat connection needs to be activated by the Installer. After connecting the room thermostat to the boiler, turn on the room thermostat in the Boiler setting menu. Even if the room thermostat is connected, the room thermostat does not function if it is not switched on in the setup menu. If the room thermostat function is switched on while the room thermostat is not connected, the unit will remain in standby mode for heating and the device will not operate. The device room thermostat symbol will

appear when the thermostat function is set to on. To setup when the device is in normal operation;

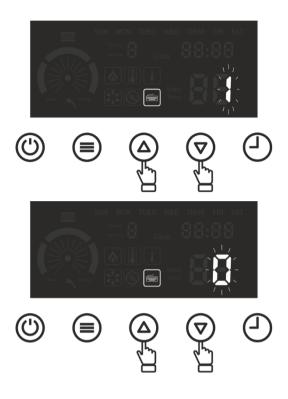
Press the button for 2-3 seconds to enter the setup menu.



The key is pressed one second at a time until the symbol appears, the room thermostat on / off indicator starts flashing.



Select 1 or 0 with the  $\bigcirc$  or  $\bigcirc$  buttons to activate or deactivate the room thermostat. Position 1 means room thermostat is activated, position 0 means room thermostat disabled. When the room thermostat is activated,  $\bigcirc$  symbol appears.



Press  $^{\textcircled{0}}$  to exit the setup menu.



# 6.4.6. Setting the Heating Mode

The device can be adjusted for underfloor heating (low temperature) and radiator heating. This prevents overheating in underfloor heating systems. The unit can be set to a temperature of up to 55° C when operating in underfloor heating, while it can be set to a maximum of 80° C in radiator heating mode. Devices connected to underfloor heating systems shall be placed into underfloor heating mode when commissioned by the installer. In this case, it will not be possible for the user to change the heating mode consciously or accidentally. In radiator heating systems, the user can switch the heating mode from floor heating to max. 55° C. the symbol appears when the device is set for radiator heating and not when it is set for underfloor heating.

When the device is in normal operation;

Press the 🖹 button for 2-3 seconds to enter the setup menu.



The button is pressed one second at a time until the symbol appears, the heating mode selection indicator starts flashing.



Use the  ${}^{ ext{ iny }}$  or  ${}^{ ext{ iny }}$  to select 0 for underfloor heating.



1 is selected for radiator heating.



Press to exit the setup menu.



⚠ For underfloor heating systems, the temperature should never be set above 55° C. Our company is not responsible for any damages and accidents that may occur in case of adjustment.

### 6.4.7. Capacity Adjustment

The device can operate in 3 different capacities. P1 means 1/3 capacity, P2 means 2/3 capacity, P3 means full capacity. For example, if the device is 12 kW, P1: 4 kW, P2: 8 Kw, P3: 12 kW. Setup when the device is in normal operation;

Press (=) the button for 2-3 seconds to enter the setup menu.



The key is pressed one second at a time until the icon appears.



Use the 
or 
buttons to set the device capacity to P1, P2 or P3. The indicator lights change according to the selected capacity.





Press (b) to exit the setup menu.



## 6.4.8. Setting the Operating Mode

The device can operate in 3 different modes.

Heater Only Mode: The device only operates only for heating. The DHW heating does not take place.

Domestic Hot Water Only Mode: The device only operates for domestic hot water (DHW). It can also be called summer mode.

Heating and Domestic Water (Cylinder) operating Mode: The device operates both heating and domestic water heating. The priority is always for domestic water heating. If there is a demand for domestic hot water, the device stops heating and works for domestic water (cylinder) heating.

When the device is in normal operation;

Enter the setup menu by pressing <sup>®</sup> for 2-3 seconds.



Press the button one second at a time until the "heating" and / or "shower" lights flash.



Use riangle or riangle to select the preferred operating mode. If heating only is selected, the device will only work for heating.



If only shower shower is selected, the appliance only works for domestic hot water.



If heating and "shower are selected at the same time, the unit will operate for heating and domestic water heating. Domestic hot water (cylinder) heating always takes priority.



Press (b) to exit the setup menu.



### 6.4.9. Setting the Time Schedule

The device can be programmed daily and weekly for heating. 7 different programs can be made. In the program setting; the start and end times of the program, the operating temperature of the device during the program and the  $\Delta T$  temperature difference can be set. If programming is performed and the program is active, the device switches to standby mode for heating during unscheduled time periods. The program can be

activated or deactivated with the  $\bigcirc$  key. When the program is active, the current program from 1 to 7 appears.

Press the 🗐 button for 2-3 seconds and enter the setup menu



Press the key one second at a time until "Timing Time Phase "appears, the time program number starts flashing."



Press the riangle or riangle button to select the time program number from 1 to 7.



Press the key or use or keys to switch the selected time program to "ON". If it remains "OFF", the time program cannot be entered.



Press (a) the button to select the weekday (s).



Use or to select the desired weekday or days. The days of the week are grouped as follows.

All days are selectable. (SUN. MON. TUES. WED. THUR. FRI. SAT.)



Could be weekend days. (SUN. SAT.)



Weekdays can be selected. (MON. TUES. WED. THUR. FRI.)



The days can be selected individually.



is pressed. The program start time starts to flash.



Use the riangle or riangleb utton to set the program start time.



is pressed. The program start minute starts flashing.



Use the riangle or riangle buttons to set the start minute.



is pressed. The program end time starts to flash.



Use  ${}^{ ext{ }}$  or  ${}^{ ext{ }}$  to set the program end time.



is pressed. The program end minute starts flashing.



Use ⓐ or ♥ to select the program end minutes.



is pressed. The temperature display starts flashing.



The operating temperature in the selected program is selected with the  $^{ ext{$\triangle$}}$  or  $^{ ext{$\heartsuit$}}$  keys.



The key is pressed and the set / return temperature difference setting indicator starts to flash.



Select the desired  $\Delta T$  (round / trip temperature difference) with the  $\triangle$  or  $\bigcirc$  keys in the selected program.



is pressed. Repeat the process for the next day .





Not all time programs have to be set. You can set as many of the time programs 1 to 7 as you want. Programs that are not set will remain in the "OFF" position and will not be active.

If the key is pressed after programming is finished or if no key is pressed for 10 seconds, the settings made are saved and the setup menu is exited.



# 6.5. Switching off

#### 6.5.1. Temporary Shutdown

In case of a short period of inactivity, you can switch off the device by pressing the button for 2-3 seconds.



The device shall be protected by the following systems by leaving the power supply active.



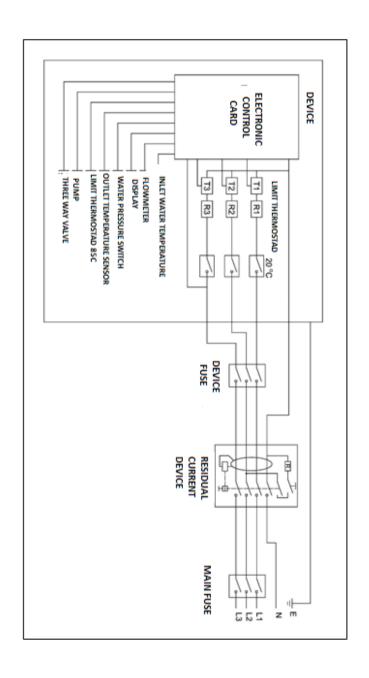
Frost Protection Function: If the water temperature inside the device drops below 5° C, the pump and heating will start to operate to bring the water temperature back to the safe value (35° C). The symbol appears on the display during the antifrost cycle.

Anti-Block Function: The pump and three-way valve in the device operate briefly every 18 hours.

## 6.5.2. Long Term Closure

If you do not operate the device for a long time, switch off the appliance fuse after pressing the ① button for 2-3 seconds. Drain the water in the system to protect against the risk of freezing as the device does not operate the frost protection.

#### 7. ELECTRICAL DIAGRAM



#### 8. REPAIR AND SERVICE

During the warranty period of the product, we provide free service to the user against material and production defects. If you encounter any problems during use, please contact our after-sales service department. Unauthorised maintenance and repair of the device will void the warranty. Our company will not be responsible for any failures and accidents.

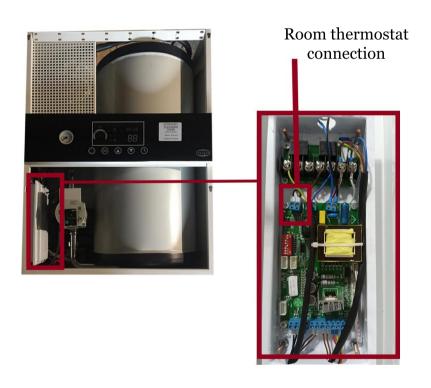
#### 9. TROUBLESHOOTING TABLE

Fault Codes	Fault					
E0	<ul><li>➤Water pressure is not enough</li><li>➤Water pressure switch</li></ul>					
	damage					
E1	≻Heating Sensor Damage					
E3	➤Water temperature is over 85C					
E4	≻Limit Thermostat in in circuit					
E5	<ul><li>→Pipe is blocked or valve is closed</li><li>→Pump Damage</li><li>→Flowmeter Damage</li></ul>					

	No light at	Buttons	Burning smell	Heating Temperature	Tap Water	Water	Reduced water	Water	
PROBLEM	control panel	operate	smeii	is not enough	Not Heat	leakage at connections	pressure	leakage from safety valve	
								vaive	
									SOLUTION WAYS
REASON									
1- No Electric									1-Control if there is electric
									or not 2-Control residual current device and fuse
2- Residual									3-Call authorized service
Current Device or fuse is off									
3- Connection									
Problem of power card and control									
panel card.									
4- LCD card damage	x	x							
1-Not proper connections									1-Connections must be made again
2Sealing gasket is damaged						x			2-Sealing gasket must be renew.
Keypad or PCB damage		×							Call the authorized service
1- Unproper cable									Turn off the device, call the
using 2- Loose			x						authorized person
connection									
High pressure								X	Discharge excess water from discharge valve
1- Not enough									1-Open water valve
open water valve 2-Flow sensor					×				completely 2- Call the authorized service
damage									dddion20d 301 vice
1-Heating Element damage									
2Limit									
Thermostat cut off current									
3-Triac damage									
4- Control card									
damage				x	х				Call the authorized service
Water Leakage at installation pipe							x		Remove the leakage from heating system installation.
Not enough water pressure					х				Control the water pressure
pressure									

## 10. Room Thermostat wiring

Ensure the chosen room thermostat is low voltage or voltage free!!



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College Town
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Tel 01276 536409
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admin@daxom.co.uk

