

	<b>c</b>	Central heating water pressure too low or too high. Limiting the output to the appliances lowest capacity. The current central heating water pressure is shown on the central heating display. If the central heating water temperature is set on the central heating display, the current central heating water pressure can be read through 'sub-program sensor values'	<b>0 – 0.5 BAR</b>	<ul style="list-style-type: none"> <li>Central heating system lacking water pressure</li> <li>No venting of the central heating system through the automatic de-aerator</li> <li>Leak in the appliance or central heating system</li> <li>Central heating pressure sensor defective</li> </ul>
			<b>3 – 4 BAR</b>	<ul style="list-style-type: none"> <li>Central heating system over pressurised</li> <li>Expansion tank defective</li> <li>Central heating pressure sensor defective</li> </ul>
	<b>d</b>	Central heating return temperature <-10°C or >118°C. In sub-program sensor values, HH (>118°C) or LL (<-10°C) will appear on the central heating water display.	<b>HH</b>	<ul style="list-style-type: none"> <li>See cause of HH in status message</li> </ul>
			<b>LL</b>	<ul style="list-style-type: none"> <li>See cause of LL in status message</li> </ul>
	<b>h</b>	Outside temperature<-10°C or >118°C. In sub-program sensor values, HH (>118°C) or LL (<-10°C) will appear on the central heating water display.	<b>HH</b>	<ul style="list-style-type: none"> <li>See cause of HH in status message</li> </ul>
			<b>LL</b>	<ul style="list-style-type: none"> <li>See cause of LL in status message</li> </ul>

### 3.2 Blocking messages

A blocking message is identified by a permanently illuminated letter on the diagnostic display. Once the blocking has been solved, the appliance will start up again automatically. So resetting is not necessary.

The possible causes are described below in order of probability. Also look for the malfunction in this order.

Code		Diagnosis	Cause
Diagnostic display	Central heating water display		
<b>c</b>	<b>HH</b>	Central heating water temperature > 118°C	<ul style="list-style-type: none"> <li>See cause of HH in 'status message/b' [3.1]</li> </ul>
	<b>LL</b>	Central heating water temperature < -10°C	<ul style="list-style-type: none"> <li>See cause of LL in 'status message/b' [3.1]</li> </ul>
<b>C*</b>		Appliance blocked because central heating system pressure is too low	<ul style="list-style-type: none"> <li>Central heating pressure lower than 1 bar</li> </ul>
<b>F</b>		Mains frequency error	<ul style="list-style-type: none"> <li>If this blocking occurs frequently or for a long period, replace control unit</li> </ul>
<b>H</b>		Internal error	<ul style="list-style-type: none"> <li>If this blocking occurs frequently or for a long period, replace control unit</li> </ul>
<b>L</b>		Electrical mains supply	<ul style="list-style-type: none"> <li>Mains supply has wrong polarity</li> <li>Not earthed</li> <li>Ionisation electrode earth wire loose</li> <li>Control unit</li> </ul>
<b>n</b>		Mains or reference voltage too low	<ul style="list-style-type: none"> <li>Mains voltage &lt; 200 volts</li> <li>Mains voltage insufficient</li> <li>Control unit</li> </ul>
<b>t</b>	<b>HH</b>	Appliance type recognition error, value > 118°C	<ul style="list-style-type: none"> <li>Control unit selected incorrectly</li> <li>Selection resistance defective</li> <li>Control unit defective</li> </ul>
	<b>LL</b>	Appliance type recognition error, value < -10°C	
	<b>1 0</b>	Appliance type recognition error, the control unit is set to 24/80	
	<b>1 1</b>	Appliance type recognition error, the control unit is set to 24/80 <sup>plus</sup>	
	<b>2 0</b>	Appliance type recognition error, the control unit is set to 32/80	
	<b>2 1</b>	Appliance type recognition error, the control unit is set to 32/80 <sup>plus</sup>	
<b>3 1</b>	Appliance type recognition error, the control unit is set to 38/80 <sup>plus</sup>		

\* this code will not be stored in the memory

### 3.3 Malfunction messages

A malfunction message is indicated by a flashing number or letter on the diagnostic display combined with a locked control unit. Once the malfunction is solved, the control unit must be unlocked by pressing the reset button once. Should the control unit fail to unlock, try again after approx. 20 seconds.

The possible causes are described below in order of probability. Also look for the malfunction in this order.

Code	Diagnosis	Cause
<b>Diagnostic display</b>		
<b>2</b>	Fan defective (5 hz deviation per minute)	<ul style="list-style-type: none"> <li>• Fan not turning</li> <li>• Fan's electrical connection loose or improperly connected</li> <li>• Control unit</li> </ul>
<b>3</b>	Incorrect ionisation (flame) signal	<ul style="list-style-type: none"> <li>• Valve in gas valve remains open or leaks</li> <li>• Control unit</li> </ul>
<b>3.</b>	No ionisation (flame) signal during start-up procedure	<ul style="list-style-type: none"> <li>• No gas supply <ul style="list-style-type: none"> <li>– gas tap closed</li> <li>– gas valve defective</li> <li>– gas valve's electrical connection loose or improperly connected</li> </ul> </li> <li>• Air supply obstructed</li> <li>• Flue tube obstructed</li> <li>• Siphon obstructed</li> <li>• Ionisation cabling not in order</li> <li>• Ionisation probe defective or causing short-circuit such as against burner</li> <li>• No ignition <ul style="list-style-type: none"> <li>– ignition transformer electrical connection loose or improperly connected</li> <li>– power cable defective</li> <li>– ignition electrode defective or causing short-circuit</li> </ul> </li> <li>• Control unit</li> </ul>
<b>4</b>	Ionisation signal lost during heat supply (diagnostic code 1 - 4)	<ul style="list-style-type: none"> <li>• Insufficient gas supply</li> <li>• Siphon obstructed</li> <li>• Ionisation electrode defective / causing short-circuit such as against burner</li> <li>• Gas valve set incorrectly</li> <li>• O<sub>2</sub> content more than 7.5% at low setting</li> <li>• Fan's low capacity circuit defective or interrupted</li> <li>• Burner damaged</li> <li>• Control unit</li> </ul>
<b>4.</b>	Ionisation signal remains too long after heat supply	<ul style="list-style-type: none"> <li>• Valve in gas valve defective, remains open or leaks</li> <li>• Control unit</li> </ul>
<b>6</b>	Gas valve control receiving voltage erroneously	<ul style="list-style-type: none"> <li>• Wiring error</li> <li>• Control unit</li> </ul>

Malfunction messages (continued)

Code	Diagnosis	Cause
<b>7</b>	Insufficient circulation of central heating water during hot water heating	<ul style="list-style-type: none"> <li>• Insufficient central heating water in the central heating water circuit                             <ul style="list-style-type: none"> <li>- Central heating water pressure too low (minimum 1 bar at the appliance)</li> <li>-Automatic de-aerator not functioning properly (air in the appliance)</li> </ul> </li> <li>• Central heating pump not running                             <ul style="list-style-type: none"> <li>- Central heating pump stuck</li> <li>- Connector K5 loose</li> <li>- Central heating pump defective</li> <li>- Thermal safety switched off</li> <li>- Control unit</li> </ul> </li> </ul>
<b>7.</b>	Insufficient circulation of central heating water during radiator heating	<ul style="list-style-type: none"> <li>• Insufficient central heating water in the central heating water circuit                             <ul style="list-style-type: none"> <li>- Central heating water pressure too low (minimum 1 bar at the appliance)</li> <li>- All (thermostat) radiator taps are closed (pressure difference regulator not set properly if present)</li> <li>- Accumulation of air caught somewhere in the central heating water circuit</li> <li>-Automatic de-aerator not functioning properly (air in the appliance)</li> </ul> </li> <li>• Central heating pump not running                             <ul style="list-style-type: none"> <li>- Central heating pump stuck</li> <li>- Connector K5 loose</li> <li>- Central heating pump defective</li> <li>- Control unit</li> </ul> </li> </ul>
<b>8</b>	High limit thermostat switches off and central heating water pressure lower than 0.5 bar	<ul style="list-style-type: none"> <li>• Central heating water pressure incorrect</li> <li>• Central heating water temperature sensor not properly connected to central heating water pipe</li> <li>• Thermal safety connection defective</li> <li>• Thermal safety defective</li> <li>• Control unit</li> <li>• Central heating pump not running                             <ul style="list-style-type: none"> <li>- Central heating pump stuck</li> <li>- Connector K5 loose</li> <li>- Central heating pump defective</li> <li>- Control unit</li> </ul> </li> </ul>
<b>9</b>	High limit thermostat switches off and temperature of central heating water sensor exceeds 80°C	<ul style="list-style-type: none"> <li>• Central heating water temperature sensor not properly connected to central heating water pipe</li> <li>• Thermal safety connection defective</li> <li>• Thermal safety defective</li> <li>• Control unit</li> <li>• Central pump not running                             <ul style="list-style-type: none"> <li>- Central heating pump stuck</li> <li>- Connector K5 loose</li> <li>- Central heating pump defective</li> <li>- Control unit</li> </ul> </li> </ul>
<b>9.</b>	Control unit safety malfunction	<ul style="list-style-type: none"> <li>• Control unit</li> </ul>
LETTER	[Letter such as A or E] Internal error in control unit.	<ul style="list-style-type: none"> <li>• Control unit</li> </ul>
[Dark display]	Appliance not receiving any power	<ul style="list-style-type: none"> <li>• Plug not inserted in wall socket</li> <li>• No electricity from wall socket</li> <li>• Wire loom connector k6 not connected</li> <li>• Control unit fuse defective</li> <li>• Mains voltage wiring defective</li> <li>• Control unit</li> </ul>

## 4. USER PROGRAM

The user program is identified by a permanently lit letter followed by a dot.

- Access : Press 'Set' button for approx. 5 seconds until the letter **b.** appears
- Next setting : Press 'Set' button
- Different value : Press 'Hot water' button
- Exit program : Press 'Reset' button

Code		Function	Setting
Diagnostic display	Central heating water display		
<b>b.</b>	<b>0 1</b>	Hot water tank temperature	60°C
	<b>0 2</b>		*65°C
	<b>0 3</b>		70°C
<b>C.</b>	<b>8 8</b>	Central heating temperature	°C
	<b>0. 0</b>	Central heating pressure sensor is not active	
	<b>8. 8</b>	Central heating pressure	*BAR
<b>F.</b>	<b>8 8</b>	Serial number + last malfunction	
<b>G.</b>	<b>8 8</b>	Serial number + last blocking	
<b>0.**</b>	<b>0 0</b>	Weather-dependent regulation	*Off
	<b>0 1</b>		Room thermostat
	<b>0 2</b>		Timer switch
<b>S.</b>	<b>0 0</b>	Non-standard setting (only applies to User program)	
	<b>0 1</b>	Return to standard* (only applies to User program)	

\* *standard*

\*\* *only visible if outside temperature sensor is connected*

## 5. INSTALLER PROGRAM

The Installer program is identified by a permanently illuminated letter without a dot.

- Access : Press 'Set' button for approx. 10 seconds until the letter **A** appears
- Different value : Press 'Hot water' button
- Next setting : Press 'Set' button
- Exit program : Press 'Reset' button
- To sub-program : Press 'Set' button followed by 'Hot water' button

Code		Function	Setting
Diagnostic display	Central heating water display		
<b>A</b>	<b>8 8</b>	Fictitious ionisation flow	
	<b>L L</b>	Low capacity (continuous)	
	<b>H H</b>	High capacity (continuous)	
<b>b</b>	<b>5 b</b>	To sub-mode sensor values	
<b>c</b>	<b>0 0</b>	Modulate at central heating temperature	Off
	<b>1 1</b>		*On
<b>C</b>	<b>6 0</b>	Central heating water temperature (maximum)	60°C
	<b>7 5</b>		75°C
	<b>9 0</b>		*90°C
<b>E</b>	<b>0 0</b>	Three-way valve capacity control	Off
	<b>1 1</b>		*On
<b>F</b>	<b>8</b>	Malffunctions (maximum 15)	Begin/end
	<b>8 8</b>	- <b>8</b> = service identification number (0 - 6)	Last malfunction code
	<b>8 8</b>	- <b>8</b> = malfunction code	Last malfunction code -1
	<b>8 8</b>		etc.
<b>G</b>	<b>8</b>	Blocks (maximum 16)	Begin/end
	<b>8 8</b>	- <b>8</b> = service identification number (0 - 6)	Last blocking code
	<b>8 8</b>	- <b>8</b> = blocking code	Last blocking code -1
	<b>8 8</b>		etc.

\* *standard*

Code		Function	Setting
Diagnostic display	Central heating water display		
<b>h</b>	<b>0 1</b>	Pump over-run for central heating	* 1 min.
	<b>0 3</b>		3 min.
	<b>0 5</b>		5 min.
<b>H</b>	<b>0. 1</b>	Pump over-run for boiler	*10 min.
	<b>0. 2</b>		20 min.
	<b>0. 3</b>		30 min.
	<b>0. 4</b>		40 min.
	<b>1. 0</b>		1 hour
	<b>2 4</b>		Continuous
<b>L</b>	<b>0 0</b>	Low capacity burner time	off
	<b>0 5</b>		5 min.
	<b>1 0</b>		* 10 min.
	<b>1 5</b>		15 min.
<b>n</b>	<b>0 0</b>	Central heating acceleration	off
	<b>0 2</b>		2 min.
	<b>0 5</b>		5 min.
	<b>1 0</b>		*10 min.
<b>0**</b>	<b>5 b</b>	To sub-program weather-dependent setting	Last blocking code
<b>P</b>	<b>0 0</b>	Anti-cycling central heating	off
	<b>0 3</b>		*3 min.
	<b>0 6</b>		6 min.
<b>Q</b>	<b>5</b>	Frost-protection (internal on central heating water)	5°C
	<b>1 0</b>		*10°C
	<b>1 5</b>		15°C
	<b>2 0</b>		20°C
<b>S</b>	<b>0 0</b>	Non-standard setting (only applies to service program)	
	<b>1 1</b>	Return to standard (only applies to service program)	
<b>t***</b>	<b>1 0</b>	Appliance recognition 24/80	
	<b>1 1</b>	Appliance recognition 24/80 <sup>plus</sup>	
	<b>2 0</b>	Appliance recognition 32/80	
	<b>2 1</b>	Appliance recognition 32/80 <sup>plus</sup>	
	<b>3 1</b>	Appliance recognition 38/80 <sup>plus</sup>	
<b>Y</b>	<b>7</b>	Capacity limitation for central heating supply 24/80 and 24/80 <sup>plus</sup>	7.5 kW
	<b>1 5</b>		15 kW
	<b>2 4</b>		*24.5 kW
	<b>1 0</b>	Capacity limitation for central heating supply 32/80 and 32/80 <sup>plus</sup>	10 kW
	<b>2 1</b>		21 kW
	<b>3 2</b>		*32 kW
	<b>1 1</b>	Capacity limitation for central heating supply 38/80 <sup>plus</sup>	11 kW
	<b>2 4</b>		24 kW
<b>3 8</b>	*38 kW		

\* *standard*

\*\* *only visible if outside temperature sensor is connected*

\*\*\* *with the proper selection, the code t will not be visible in the service program*

## 6. SERVICE SERIAL NUMBER

Every malfunction is preceded by a service identification number. The service identification number is a handy tool for servicing the *ATMOS MULTI*. By changing this number after every service, the next time, one can see which blocks and/or malfunctions occurred since the last service.

To change the service identification number, the malfunction logbook **F** must first be selected. Then the 'Hot water' button is kept pressed in while finally the 'Set' button is pressed.

The service identification number will be increased by 1 to a maximum of 6, and will then start again from the number 0. When changing the service identification number, it is simultaneously changed in the blocking logbook.

The example below shows the logbook codes in the CH Water display, obtained by stepping through the most recent logged faults using the 'Hot water' button.

Example		DIAGNOSIS	CENTRAL HEATING WATER DISPLAY			
•	OCT '05 – INSTALLATION OF THE APPLIANCE – CONTENTS OF MALFUNCTION LOGBOOK – CONTENTS OF BLOCKING LOGBOOK	F G	0- 0-			
•	OCT '06 – ANNUAL INSPECTION – CONTENTS OF MALFUNCTION LOGBOOK – CONTENTS OF BLOCKING LOGBOOK – SERVICE ID NUMBER INCREASED BY MEANS OF 'HOT WATER' AND 'SET' BUTTON	F* G**	0- 0- 0-	07. 0c 1-	07. 0- 07	0- 07
•	OCT '07 – ANNUAL INSPECTION – CONTENTS OF MALFUNCTION LOGBOOK – CONTENTS OF BLOCKING LOGBOOK – SERVICE ID NUMBER INCREASED BY MEANS OF 'HOT WATER' AND 'SET' BUTTON	F*** G	1- 1- 1-	13. 0c 2-	07. 1- 07	07 1-

\* Two times **07.** means insufficient central heating water flow during central heating operation.

\*\* One **0c** means for example that the central heating water temperature connector was loose.

\*\*\* Malfunction **13** was added in the second year. This can be seen by the first number **1** (service identification number). The second number **3.** is the malfunction (in this case no ionisation signal during start-up procedure). The two last malfunctions are preceded by a different service number and are therefore from the previous services.

### COMMENT!

Do not forget to increase the service identification number after each service/maintenance and record this with the date on the service chart of the appliance.







# SERVICE RECORD

It is recommended that your heating system is serviced regularly and that the appropriate Service Record is completed.

## Service Provider

Before completing the appropriate Service Record below, please ensure you have carried out the service as described in the manufacturer's instructions.

Always use the manufacturer's specified spare part when replacing controls.

### SERVICE 1 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 2 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 3 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 4 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 5 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 6 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 7 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 8 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 9 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

### SERVICE 10 Date

Energy Efficiency Checklist completed? Yes  No

Engineer Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone Number \_\_\_\_\_

CORGI ID Number \_\_\_\_\_

Comments \_\_\_\_\_

Signature \_\_\_\_\_

