



GRANT<sup>UK</sup>

Part No. DOC 17 Rev. 04 September 2005

## FITTING and USER INSTRUCTIONS

# Electronic Timer Kit for Combi 70 V3, Combi 90 V3, Combi Max Vortex Combi 26 and Vortex Combi 36

### 1 *Kit contents*

The Electronic Timer Kit for the Grant Combi 70 and Combi 90 boilers (Ref. ETKIT) contains the following items:

- 1 ACL Type 711 7-day single channel electronic timeswitch
- 1 Wiring harness
- 1 Fitting and User instructions

### 2 *Electrical connections*

The wiring harness must be connected to the ACL Type 711 electronic timer as follows:

- Blue wire: To **Mains Neutral (N)** terminal of the timer
- Red wire: To **Mains Live (L)** terminal of the timer
- Brown wire: To **On** terminal of the timer
- Brown wire: To **Common** terminal of the timer

### 3 *Fitting procedure*

**IMPORTANT: Ensure the electrical supply to the boiler has been isolated before fitting the timer.**

- 1 Remove the front door and front top casing.
- 2 Loosen (do not remove) the four screws securing the control panel to the side panels. Hinge the control panel forwards and allow it to drop down to gain access to the rear of the panel.
- 3 Remove the two screws securing the terminal block cover and lift off the cover.

**4 Remove the factory fitted link from terminals 8 and 9.**

- 5 Remove the four screws from the rear of the control panel. Remove the rear access cover.
- 6 From underneath the control panel, remove the screw securing the bracket behind the timer aperture. Withdraw and discard the bracket.

- 7 Remove the blanking piece from the timer aperture, in the control panel fascia, by firmly pressing on the Grant logo (in the centre of the black square) until it is detached from the rear of the fascia. Remove the blanking piece from the panel and discard.
- 8 Fit the 6-way plug on the timer wiring harness, firmly into the 6-way socket, to connect the timer to the boiler.
- 9 Carefully fit the timer into the aperture, and gently push fully home.
- 10 Replace the rear cover of the control panel and secure with the four screws previously removed.
- 11 Replace the terminal block cover in position over the terminal block, taking care not to trap any wires, and secure in position with the two screws previously removed.
- 12 Hinge the control panel back into position on the two retaining screws and replace the front top casing panel. Reconnect the electricity supply and check the operation of the timer. Refer to the instructions overleaf for operating and setting the timer.

**IMPORTANT: Leave these instruction with the User**

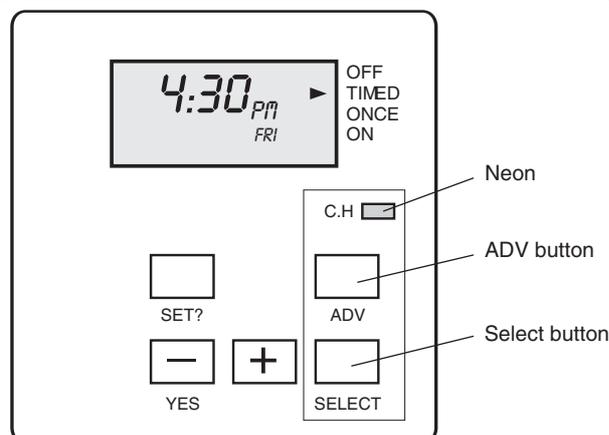


Fig. 1



#### 4 *General programmer notes*

The timer will automatically control the times at which your boiler operates for central heating (up to two On - Off periods per day) each day of the week. It also provides a permanent display of the time of day (12 hr with am and pm) and day of the week. A small neon lights when the heating is in an 'On' period.

If the power supply to the boiler is interrupted, a built-in rechargeable battery will retain all the settings in the timers memory for up to 24 hours (the display will go blank after about 1 hour).

The timer is supplied with a set of standard On - Off settings (see section 10) or you can set your own if required.

When setting the timer, questions will be displayed. Use the **YES** and **SET ?** buttons to answer these (the **SET ?** button indicates no and moves the timer to the next question). Pressing **SET ?** after altering a setting stores that setting in the timers memory.

Always release a button after pressing it. When using the + or - buttons to change times, pressing and releasing the button changes the time in single units but keeping the button pressed in changes it more quickly.

Read the useful tips section before setting the timer.

#### 5 *Set the time and day of the week, see Fig. 1*

- 1 Press the **SET ?** button.

The display will appear as shown ⇨



- 2 Press the **YES** button and the day of the week part of the display will flash. Press the + or - buttons to set the correct day.  
With the correct day of the week displayed press the **SET ?** button.
- 3 The hour part of the display will now flash.  
Press the + or - buttons to set the hour (am or pm) then press the **SET ?** button.
- 4 The minutes part of the display will now flash.  
Press the + or - buttons to set the minutes then press the **SET ?** button.
- 5 Ignore the Set Prog ? display and press the **SET ?** button again.
- 6 Ignore the Test ? display and press the **SET ?** button again.

- 7 Ignore the Set H'day ? display and press the **SET ?** button again.

The correct time of day and day of the week will now be displayed.

#### 6 *Operating mode*

The timer provides you with four operating modes for central heating as follows:-

**OFF** ..... Permanently off

**TIMED** . Available during the set On/Off periods

**ONCE**.... Available for one period per day (from first On till last Off settings)

**ON** ..... Constantly available

To select the mode you require for central heating press the **SELECT** button until the arrow in the display is next to the mode you require.

Your timer will now operate using the set of standard On/Off settings as shown in the table on the back page.

#### 7 *Set your own programme*

With the display showing the correct time and day of the week set your own programme as follows:-

- 1 Press **SET ?** button and *Set Clock ?* will be displayed.

Press **SET ?** button again and *Set Prog ?* will be displayed.

Press **YES** button.

The display will appear as shown ⇨



- 2 **To set On/Off timings to be the same each day,** Monday to Friday press **YES**.  
(To set different timings for each day, see paragraph 3).

The start of the first (ON1) heating period is displayed.

Press the + or - buttons to alter the time display in 10 minute steps to set the required time.

Press **SET ?**. The end of the first period (OFF1) is displayed.

Set time required as above using + or - buttons.

Press **SET ?**. The start of the second (ON2) heating period is displayed.

Set time required as above using + or - buttons.

Press **SET ?**. The end of the second period (OFF2) is displayed.

Set time required as above using + or - buttons.

When the OFF2 time is set, press **SET ?**.

The display will appear as shown ⇒



- 3 To set different timings for each day of the week**, press **YES** to change the Monday settings, or press **SET ?** to move to Tuesday.

If **YES** is pressed, the first (ON1) heating period is displayed.

Alter the settings as described in paragraph 2 above.

If you do not wish to alter the heating times for that day, press **SET ?** to move to Tuesday.

Continue to alter each day, as necessary, or press **SET ?** to move through the weekdays.

- 4 To set timings for weekend**, after the Friday display, press **SET ?**.

The display will appear as shown ⇒



Press **YES** to set timings for Saturday and Sunday **together**.

Press **SET ?** to set timings for Saturday and Sunday **separately**.

- 5** After setting weekend timings (as previously described above) press **SET ?**.

Ignore the *Test ?* display and press **SET ?**.

Ignore the *Set H'day ?* display and press **SET ?** to return the timer to its operating mode.

The display will show the correct time of day and day of the week.

## 7 Check the programme settings

To check the timings you have set, press **YES** when *Test ?* is displayed.

The display will show the time as just after midnight on actual day you are in.

Press **YES** and keep it pressed. The time will advance to the start of the first On period (ON1). The display will pause for 2 to 3 seconds and the neon will light. Continue pressing **YES** to advance to the end of the first On period (OFF1). The display will pause and the neon will switch off.

Continue to press **YES** and the second of the On/Off periods will be displayed for that day, then the next day and so on until all the days of the week have been checked.

## 8 Set holiday

You can use this function just before you go on holiday to set the number of days you require the boiler to be off.

Press and release **SET ?** until *Set H'day ?* is displayed.

Press **YES** and 00 appears on the display.

Press + or - buttons to set the number of days you require the boiler to be off (up to 99 days).

Press **SET ?** and *H'day* will be displayed.

## 9 Useful tips

When setting the times for the 'on' periods it is useful to remember that it might take up to an hour for the house to become warm, especially in colder weather. Also the effect of the central heating will remain for a time when the central heating is turned off.

When setting the time for the start of the first on period (ON1) it must be after midnight. The time for the end of the last on period (OFF2) can be after midnight, but it must not be more than 23 hrs 50 mins after (ON1).

The switching times must be in sequence, if you try to set OFF1 at an earlier time than ON1 the display will stop at the ON1 time with the OFF symbol flashing. If you try to set ON2 at an earlier time than OFF1 the display will stop at the ON2 time and with the ON symbol flashing.

If you attempt to set ON1 after OFF1, the ON symbol will flash and the OFF1 setting will follow the ON1 time being set to prevent incorrect programming. The same applies to the other ON and OFF times and also between the OFF and ON times.

If you become confused while setting your programme and wish to restart again, press the **SET ?** and **-** buttons together for a moment. The display will change to a midnight display and the standard set of On - Off settings (see table below). You will now have to reset the time and day of the week and set your own programme again.

While setting any times, if a button is not pressed for 1 to 2 minutes, the programmer will go back to its normal operating mode.

To temporarily override the current switching time, i.e. change Off to On or On to Off, simply press the **ADV** button to advance to the next switching time. The programme returns to normal at the end of the switching time just selected.

For Summer use the central heating can be turned off by using the **SELECT** button to move the arrow in the side of the display to OFF.

If the electricity supply to the boiler is interrupted, the timer will retain the time settings for up to 24 hours and will not have to be reset to the correct time of day when the supply is restored (the display remains for up to 1 hour, but will re-appear when the supply is restored).

**Note: For Combi 70 V3, Combi 90 V3 and Combi Max boilers only - To ensure that the hot water performance is not reduced first thing in the morning, or in the evening if the heating is off through the day, set the heating timer to switch the heating on at least 30 minutes before hot water will normally be required in the morning (or evening).**

When setting the times for the 'on' periods it is useful to remember that it might take up to an hour for the house to become warm, especially in colder weather. Also the effect of the central heating will remain for a time when the central heating is turned off.

Do not forget that if you require central heating during an 'off' period, simply set the Heating switch to CONSTANT, remember the switch must be reset to TIMED at a later time for the timer to return to your pre-set periods.

## 10 Timer settings

Switching mode		Monday - Friday		Saturday - Sunday	
		Standard times	Your own times	Standard times	Your own times
		CH	CH	CH	CH
First timed period	ON1	6:30am		6:30am	
	OFF1	8:30am		9:00am	
Second timed period	ON2	4:30pm		4:00pm	
	OFF2	10:30pm		11:00pm	



Complies with the EC Low voltage, Electromagnetic compatibility and Boiler efficiency Directives

89/336/EEC  
73/23/EEC  
92/42/EEC



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Instruction leaflet compiled and designed by Publications 2000 Tel: (01670) 356211