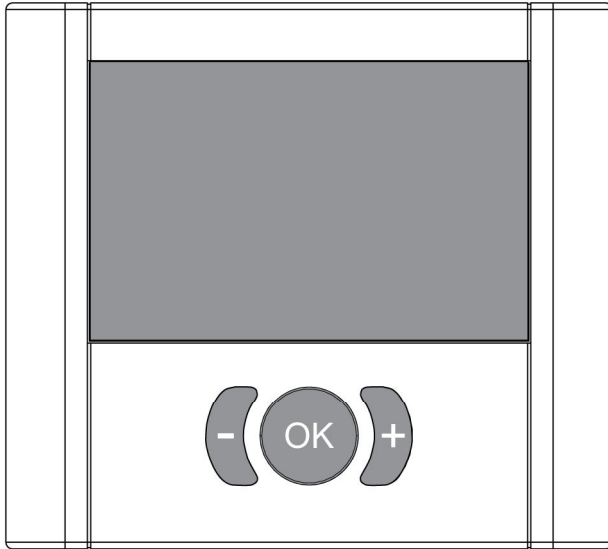# 9   Operating digital thermostats

The digital thermostats T-36 and T-38 have a screen with a number of symbols for displaying different messages.
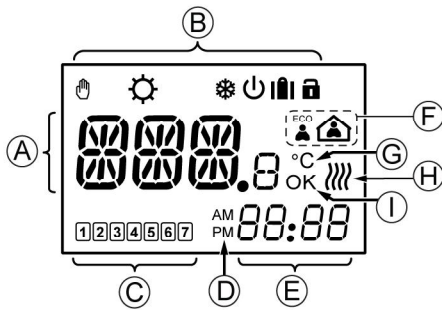
Below the screen there are three buttons for operating the thermostats.

G002098A

9.1   Screen layout

The figure below shows all possible symbols and characters that can be displayed on the screen:

G002440A

Pos.	Icon	Description
A		Message field using three alphanumerical characters
		Temperature reading using a + or - sign, two digital characters, a decimal point and a character showing either 0 or 5

Pos.	Icon	Description
B		Manual override. For example forced comfort or economy mode. Also used as a warning when defining the Min cooling temperaure in RFT mode.
		Heating mode
		Cooling mode
		Standby mode
		Holiday mode Used with empty house icon, see pos. **F** below.
		Lock mode. The three navigation buttons below the screen are locked.
C	1	T-38 only Weekday selected indicators 1 = Monday 7 = Sunday
	1	T-38 only Weekday deselected indicators
D	AM PM	T-38 only Indicator showing AM or PM when the thermostat is set to 12 h mode
		No indication when the thermostat is set to 24 h mode
E	88:88	T-38 only Digital clock
	88.88	Software version
F	ECO	Economy mode
		Comfort mode
		Holiday mode Used with suitcase icon, see pos. **B** above.
G	°C	Temperature unit, shown when the character group **A** shows a temperature

Pos.	Icon	Description
H	))))‌	Heating/Cooling demand
		• 0 waves are shown if manual balancing is selected and the heating or cooling demand is off
		• 4 waves are shown if manual balancing is selected and the heating or cooling demand is on
		• 0 to 3 waves alternating sequentially if autobalancing is selected
I	OK	OK indicator. Confirms an activated function.

9.2 Operating buttons

The following three buttons are used to operate the thermostats Uponor Thermostat:

Button	Description
OK	The OK button is used to:
	• Enter and exit the settings menu
	• Confirm a setting
	• Enter and exit comfort or economy mode
- +	The minus and plus sign buttons are used to:
	• Set the temperature setpoint
	• Toggle between comfort and economy modes
	• Modify settings in the settings menus
	• Enter and exit the lock mode (press and hold simultaneous for 3 seconds)

9.3 Power-up

At power-up the thermostat designation, T-36 or T-38, and the software version is shown for three seconds. Then the thermostat enters into run mode..

Example:
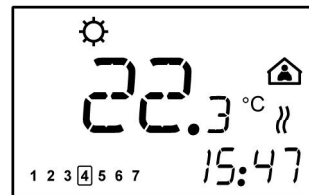

9.4 Run mode

Run mode display description

In run mode the screen displays the following:

Note: The different modes given in the list below are explained in sections 9.5 to 9.15 below.

• Room temperature in degrees Celsius

• Heating or cooling icon depending on system working mode

• ECO or comfort mode icon depending on system working mode

• Heating/Cooling demand icon if a demand is present

• Standby icon if the system is set in standby mode

• Holiday mode icon and remaining days if system is set in holiday mode

• Lock mode icon if the thermostat is set in lock mode

• Manual override icon if the system is set in forced comfort or ECO mode

• If a connected floor sensor is faulty, this is indicated by a flashing star ❄ to the left of the displayed room temperature

• (T-38 only) Weekday and time

Example:

In the example above the following is displayed:

• System works in heating mode

• Room temperature is 22.3 °C

• System works in comfort mode

• System works in auto-balancing mode, heating demand is on

• Today is Thursday

• Time is 15:47

Changing temperature setpoint

To adjust the temperature setpoint of the current mode from the run mode screen:

1. Press the + or - button once.

   The screen shows the current setpoint flashing.

2. Press the + or - button repeatedly to adjust the setpointtemperature.

   When the new sepolnt is set, the screen returns to run mode after a few seconds, showing the room temperature.

Setting forced ECO or comfort mode

To set the system in forced ECO or comfort mode:

1. Press the **OK** button.

   The house icon starts flashing.

2. Press the + or - button to change from comfort to ECO mode or the other way around.

3. Press the **OK** button.

   The screen returns to run mode displaying the selected ECO or comfort mode and the manual override icon ✋.

To remove forced mode:

1. Press and hold the **OK** key for 3 seconds.

   The manual override icon ✋ disappears and the system returns to the mode, ECO or comfort, as defined by the programming.

9.5 Parameter and mode settings menu

To enter the parameter and mode settings menu:

1. Press and hold the **OK** button for three seconds to enter the settings menu.
   - T-38: The first menu, **CLK** (clock), is displayed
   - T-36: The first menu, **MOD** (mode), is displayed

2. Press the **+** button repeatedly to reach the other menus.

   The menus are presented in the following order:

   Uponor Thermostat T-36
   - **MOD** (regulation choices)
   - **BAL** (balancing mode)
   - **ECO** (economy mode)
   - **CAL** (calibration)
   - **OFF** (standby mode)

   Uponor Thermostat T-38
   - **CLK** (clock)
   - **PRG** (programming)
   - **HOL** (holiday mode)
   - **MOD** (regulation choices)
   - **BAL** (balancing mode)
   - **T °C** (temperature setpoint)
   - **CAL** (calibration)
   - **OFF** (standby mode)

3. Press the **-**button to run the menu sequence in opposite order.

4. Press and hold the **OK** button for three seconds to exit the settings menu.

9.6 CLK – Clock settings (T-38 only)

The clock menu is used to set date and time.

To set the clock parameters:

1. Press and hold the **OK** key for 3 seconds.

   The next screen displays **CLK** (clock).

2. Press **OK** to enter the clock menu.

   The screen displays **YR** (year) and four digits designating the year are blinking.

3. Press the **+** and - buttons to change the setting.

4. Press **OK** to confirm the setting.

   The screen displays **MTH** (month) and two digits designating the month are blinking.

5. Press the **+** and - buttons to change the setting.

6. Press **OK** to confirm the setting.

   The screen displays **DAY** (day) and two digits designating the date are blinking.

7. Press the **+** and - buttons to change the setting.

8. Press **OK** to confirm the setting.

   The screen displays **TME** (time) and either **24:H** or **AM/PM 12:H**, designating the time format are blinking.

9. Press the **+** and - buttons to change the setting.

10. Press **OK** to confirm the setting.

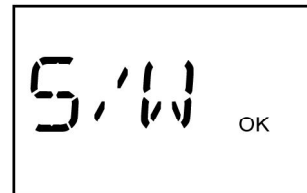The screen displays **TME** (time) and four digits designating the time are blinking.

11. Press the **+** and - buttons to change the setting:
    - Press once and the time setting increments with a 1 minute step.
    - Press continuously and the time setting increments with 1 minute steps, after a few seconds increments are made with 10 minute steps and then 1 hour steps.

12. Press **OK** to confirm the setting.

    The screen displays **S/W** (summer-winter time).

    Two alternatives are selectable:
    - **S/W** and **OK** displayed: Automatic change of summer-winter time activated
    - **S/W** only displayed: Automatic change of summer-winter time dis-activated

    Example: Automatic summer-winter time change selected.

13. Press **OK** to confirm the setting and proceed to the next menu, **PRG**.

9.7 PRG – Programming (T-38 only)

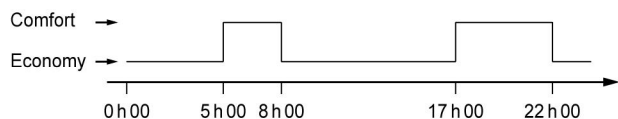The programming menu is used to adjust the settings for comfort and economy modes.

To change the programming:

1. When **PRG** is displayed, press **OK** to enter the menu.

   The next screen displays one of the following:
   - **ON**, programming is enabled (default setting)
   - **OFF**, programming is disabled

2. Press the **+** and - buttons to select the setting **ON** or **OFF**.

   Then select one of the following alternatives to proceed:

   a. From setting **ON**, press **OK** to start the programming, see step 3. below.

   b. From setting **OFF**, press **OK** to proceed to the next menu, see section

3. When **PRG** is displayed, press **OK** to enter the menu.

   The group of days flashes (day numbers with frames).

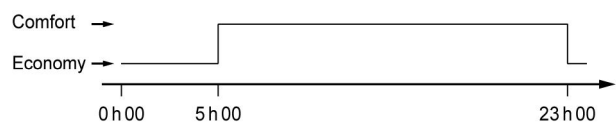
4. Press + or - successively to select the group of days.

   There are three alternatives:
   - 1 2 3 4 5 6 7 Monday till Friday, default setting
   - 1 2 3 4 5 6 7 Monday till Saturday
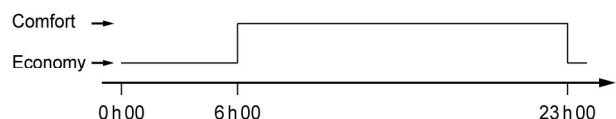
- [1][2][3][4][5][6][7] Monday till Sunday

5. Press **OK** to confirm the setting.

   The digital clock starts flashing.

6. Press and hold the **OK** key for 3 seconds to select the default schedule.

   The diagram below shows the default schedule for Monday till Friday or Monday till Saturday programming groups.

   The next diagram shows the default schedule for Monday till Sunday prgramming group.

7. Press the **+** and - buttons to modify the default clock setting:
   - Press once and the time setting increments with a 1 minute step.
   - Press continuously and the time setting increments with 1 minute steps, after a few seconds increments are made with 10 minute steps and then 1 hour steps.
   - Set the clock to the time for the first comfort/economy changeover.

8. Press the **OK** key to change between comfort and economy mode at the desired time.

   Continue to the next comfort/economy changeover with the + button. Up to 5 changes in 24 hours are permitted.

9. Continue stepping the clock until midnight is passed.

   Depending on the selection made in step 4. above, the screen displays the following:
   - If the group Monday till Friday was selected, then **1 2 3 4 5 [6][7]** Saturday till Sunday is displayed.
   - If the group Monday till Saturday was selected, then **1 2 3 4 5 6 [7]** Sunday is displayed.
   - If the group Monday till Sunday was selected, then the screen displays the next menu, **HOL**, see section 9.8 HOL – Holiday mode (T-38 only).

10. Press and hold the **OK** key for 3 seconds to select the default schedule.

11. Press the **+** and - buttons to modify the default clock setting:
    - Press once and the time setting increments with a 1 minute step.
    - Press continuously and the time setting increments with 1 minute steps, after a few seconds increments are made with 10 minute steps and then 1 hour steps.
    - Set the clock to the time for the first comfort/economy changeover.

12. Press the **OK** key to change between comfort and economy mode at the desired time.

    Continue to the next comfort/economy changeover with the + button. Up to 5 changes in 24 hours are permitted.

13. Continue stepping the clock until midnight is passed.

    The screen displays the next menu, **HOL**.

9.8   HOL – Holiday mode (T-38 only)

The holiday mode menu is used to set a temperature setpoint that is used for a defined period when the house is empty.

Entering holiday mode

1. When **HOL** is displayed, press **OK** to enter the menu.

   The screen displays the following:
   - Heating ☼ or cooling ❄ icon depending on mode
   - Holiday suitcase ▐▌ icon
   - Ambient temperature
   - Empty house ⌂ icon flashing
   - 1 d flashing, designating the number of days the holiday mode is active

2. Press the **+** and - buttons to set the number of days the hday mode shall be active.

3. Press **OK** to confirm the setting.

   The holiday mode temperature setpoint and the empty house icon are flashing.

4. Press the **+** and - buttons to change the holiday mode temperature setpoint.

   Default setting: 18 °C

   Setting range: 10 – 30 °C

5. Press **OK** to confirm the setting.

   The screen enters run mode.

   The thermostat starts to countdown the days when holiday mode is active.

   The holiday mode ends automatically at 00:00 the day 0.

Exiting holiday mode

1. Press and hold the **OK** button for three seconds.

   The holiday mode is canceled and the run mode is entered.

9.9   MOD – Regulation choices

The regulation choices menu is used to set the regulation mode of the thermostat.

1. When **MOD** is displayed, press **OK** to enter the menu.

   The next screen displays one of the following:
   - **RT** – room sensor regulation
   - **RFT** – room sensor regulation with floor sensor limitation
   - **RS** – remote sensor regulation

2. Press the **+** or - button to change the setting.

3. Press **OK** to confirm the setting.

   If RT or **RS** regulation mode is selected, the next menu is displayed, see section 9.10 BAL – Balancing mode.

   If RFT regulation mode is selected, the next regulation setting, is displayed.

4. (Heating mode only)

The symbol ☼ (heating mode) and **MAX** is displayed (maximum floor temperature limitation).

4.1. Press **OK** to display the limitation temperature.

4.2. Press the **+** and - buttons to change the setting.

Default setting: 26 °C

Setting range: 20 – 45 °C

4.3. Press **OK** to confirm the setting.

5. (Heating and cooling modes)

The heating ☼ or cooling ❄ icon and **MIN** is displayed (low floor temperature limitation).

5.1. Press **OK** to display the limitation temperature.

5.2. Press the **+** and - buttons to change the setting.

Default setting: 20 °C

Setting range: 10 – 30 °C

> **!** **NOTE!**
> In cooling mode, if the **MIN** value is set below 14 °C, the hand ✋ and cooling ❄ icons will flash to indicate a warning for condensation.

5.3. Press **OK** to confirm the setting and proceed to the next menu, **BAL**.

9.10 BAL – Balancing mode

The balancing mode menu is used to select between manual and auto-balancing.

The auto-balance function removes the need for manual balancing of the manifold at installation. The principle for automatic balancing is that the energy required by each loop is distributed in pulses. The length of the pulses in each loop is calculated from the actual heat demand of the room.

1. When **BAL** is displayed, press **OK** to enter the menu.

The screen displays one of the following:

- **MAN** – manual balancing
- **AB** – automatic balancing

2. Press the **+** or - button to change the setting.

3. Press **OK** to confirm the setting and proceed to the next menu.

9.11 ECO – Economy mode (T-36 only)

The economy mode menu is used to set the setback temperature for economy mode.

In heating mode, the setback temperature is negative, in cooling mode it is positive.

Activation and deactivation of the economy is done from the run mode screen, see section 9.4 Run mode, page 27.

1. When **ECO** is displayed, press **OK** to enter the menu.

The screen displays the setback temperature.

2. Press the **+** or - button to change the setting.

Default setting: 4 °C

Setting range: 0 – 11 °C

Setting accuracy: 0.5 °C

3. Press **OK** to confirm the setting and proceed to the next menu.

9.12 T°C – Comfort and economy mode temperatures (T-38 only)

The menu for comfort and economy mode temperatures is used to set the setpoint temperature in comfort mode and the setback temperature in economy mode.

The settings will apply to the mode the system is set to work in, heating or cooling.

The default comfort and economy settings are used unless the user changes a setpoint from the run mode screen. In that case the latest setpoint setting will be applied.

Adjusted settings are saved in the thermostat.

1. When **T °C** is displayed, press **OK** to enter the menu.

The screen displays the setpoint temperature and the comfort icon.

2. Press the + or -button to change the setting.

Default setting, heating mode: 21 °C

Default setting, cooling mode: 26 °C

Setting range: 5 -30 °C

Setting accuracy: 0.5 °C

3. Press **OK** to confirm the setting.

The screen displays the economy setpoint temperature and the ECO icon.

4. Press the + or - button to change the setting.

Default setting, heating mode: 17 °C

Default setting, cooling mode: 30 °C

Setting range: 5 - 30 °C

Setting accuracy: 0.5 °C

5. Press OK to confirm the setting and proceed to the next menu, CAL

9.13 CAL – Calibration

The calibration menu is used to adjust the temperature sensor in the thermostat.

1. When **CAL** is displayed, press **OK** to enter the menu.

The room temperature is displayed.

2. Press the **+** and - buttons to change the setting in 0.1 °C steps.

Setting range: –3 °C to +3 °C

3. Press **OK** to confirm the setting and proceed to the next menu.

9.14 OFF – Standby mode

In standby mode, the regulation of the room temperature is disabled, but thermostat still displays the current room temperature.

Entering standby mode

1. Press **OK** to confirm the standby mode.

The standby icon ⏻ and the room temperature is displayed.

Exiting standby mode

1. Press and hold **OK** for three seconds.

   The thermostat name and software version are displayed for two seconds. Then the thermostat enters run mode.

9.15 Lock mode

The three operating buttons can be locked to prevent unintentional use.

Entering lock mode

1. Press and hold the **+** and - buttons simultaneuously for three seconds.

   The lock icon 🔒 appears. Other displayed information remains and the thermostat operates as set-up.

Exiting lock mode

1. Press and hold the **+** and - buttons simultaneuously for three seconds.

   The lock icon 🔒 disappears.

9.16 Menu trees

The following sections show the menu trees for Uponor Thermostats T-36 and T-38

9.16.1 Uponor Thermostat T-36

	Run mode, see section 9.4, page 27
MOD	Regulation choices, see section, see section 9.9, page 29
RT	Room sensor regulation, see section 9.9, page 29
RFT	Room sensor regulation with floor sensor limitation, see section 9.9, page 29
MAX	Maximum floor temperature limitation, see section 9.9, page 29
MIN	Minimum floor temperature limitation, see section 9.9, page 29
RS	Remote sensor regulation, see section 9.9, page 29
BAL	Balancing mode, see section 9.10, page 30
MAN	Manual balancing, see section 9.10, page 30
AB	Automatic balancing, see section 9.10, page 30
ECO	Economy mode, see section 9.11, page 30
CAL	Calibration, see section 9.13, page 30
OFF	Standby mode, see section 9.14, page 30
	Run mode, see section 9.4, page 27

9.16.2 Uponor Thermostat T-38

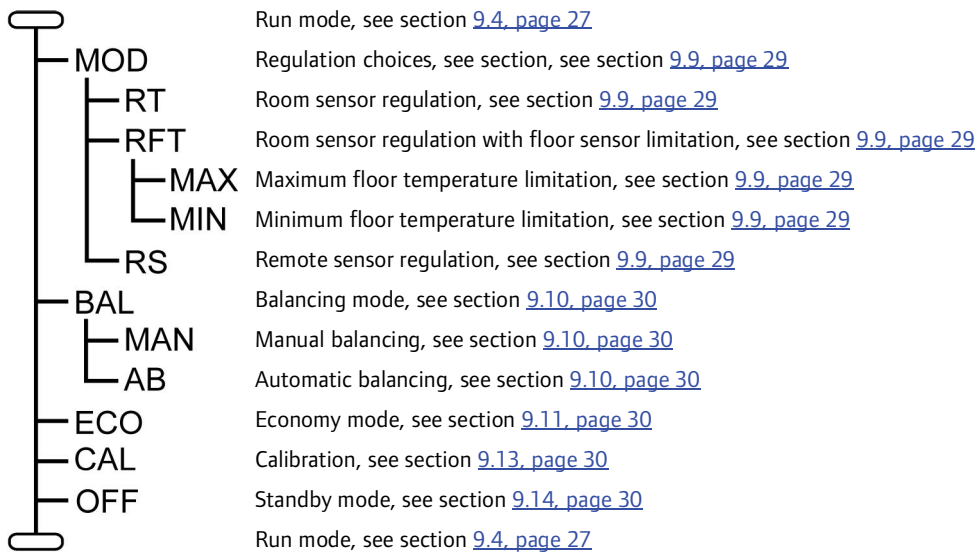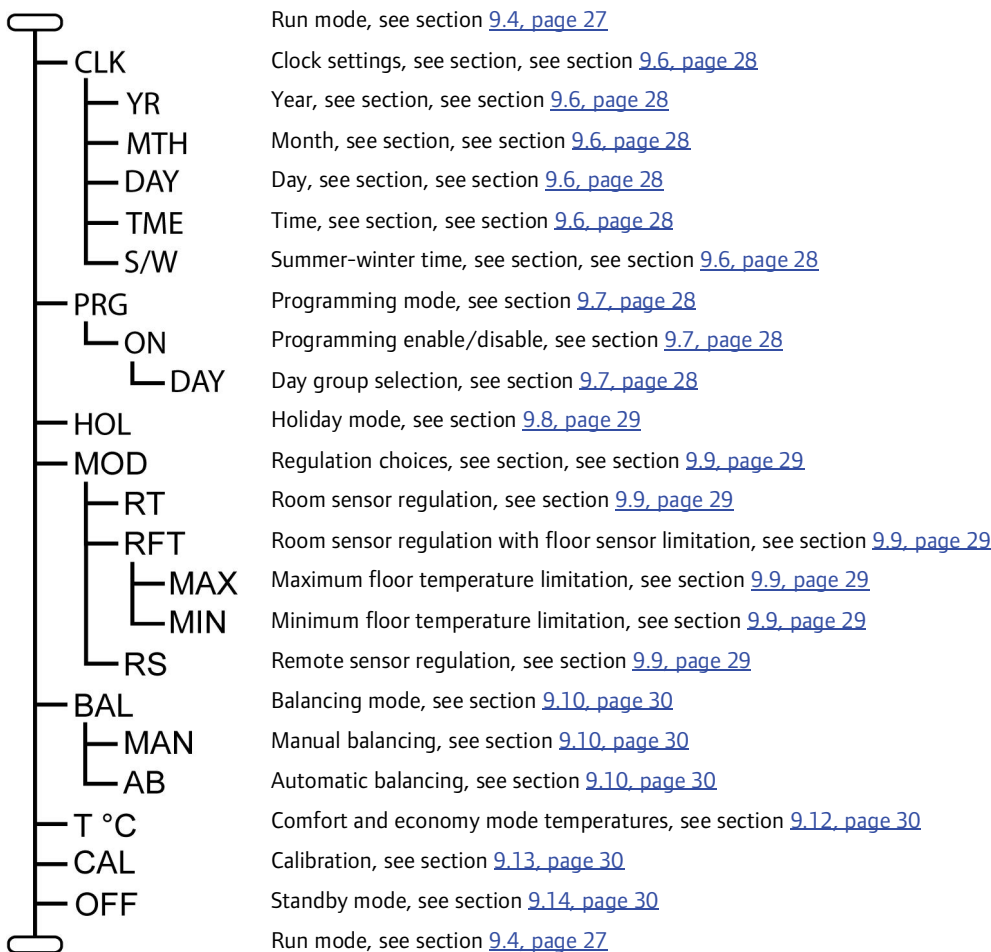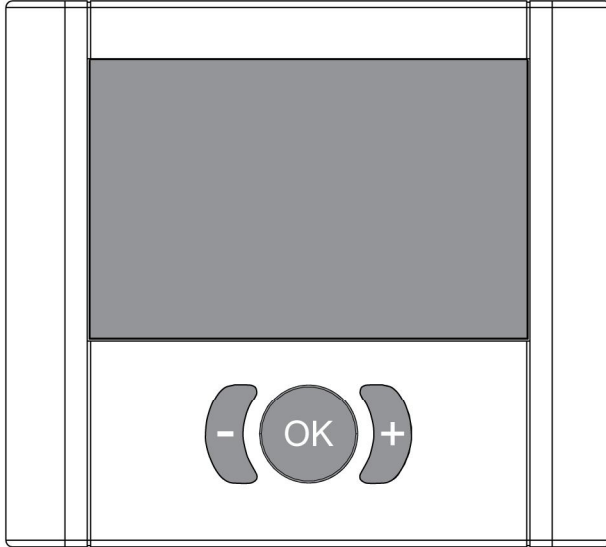|	
	Run mode, see section 9.4, page 27
CLK	Clock settings, see section, see section 9.6, page 28
YR	Year, see section, see section 9.6, page 28
MTH	Month, see section, see section 9.6, page 28
DAY	Day, see section, see section 9.6, page 28
TME	Time, see section, see section 9.6, page 28
S/W	Summer-winter time, see section, see section 9.6, page 28
PRG	Programming mode, see section 9.7, page 28
ON	Programming enable/disable, see section 9.7, page 28
DAY	Day group selection, see section 9.7, page 28
HOL	Holiday mode, see section 9.8, page 29
MOD	Regulation choices, see section, see section 9.9, page 29
RT	Room sensor regulation, see section 9.9, page 29
RFT	Room sensor regulation with floor sensor limitation, see section 9.9, page 29
MAX	Maximum floor temperature limitation, see section 9.9, page 29
MIN	Minimum floor temperature limitation, see section 9.9, page 29
RS	Remote sensor regulation, see section 9.9, page 29
BAL	Balancing mode, see section 9.10, page 30
MAN	Manual balancing, see section 9.10, page 30
AB	Automatic balancing, see section 9.10, page 30
T °C	Comfort and economy mode temperatures, see section 9.12, page 30
CAL	Calibration, see section 9.13, page 30
OFF	Standby mode, see section 9.14, page 30
	Run mode, see section 9.4, page 27

10 Operating Uponor Timer I-36

Uponor Timer I-36 has a screen with a number of icons and symbols for displaying messages.
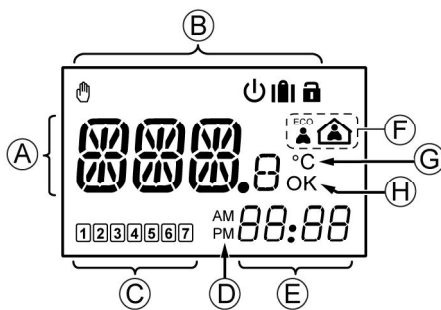
Below the screen there are three buttons for operating Uponor Timer I-36.

G002098A

10.1 Screen layout

The figure below shows all possible symbols and characters that can be displayed on the screen:

G002483A

Pos.	Icon	Description
A		Message field using three alphanumerical characters
		Temperature reading using a + or - sign, two digital characters, a decimal point and a character showing either 0 or 5

Pos.	Icon	Description
B		Manual override. For example forced comfort or economy mode.
		Standby mode
		Holiday mode Used with empty house icon, see pos. **F** below.
		Lock mode. The three navigation buttons below the screen are locked.
C	1	Weekday selected indicators 1 = Monday 7 = Sunday
	1	Weekday deselected indicators
D	AM PM	Indicator showing AM or PM when the thermostat is set to 12 h mode
		No indication when the thermostat is set to 24 h mode
E	88:88	Digital clock
	88.88	Software version
F	ECO	Economy mode
		Comfort mode
		Holiday mode Used with suitcase icon, see pos. **B** above.
G	°C	Temperature unit, shown when the character group **A** shows a temperature
H	OK	OK indicator. Confirms an activated function.