



heating and plumbing products that won't cost the earth

# Intaeco

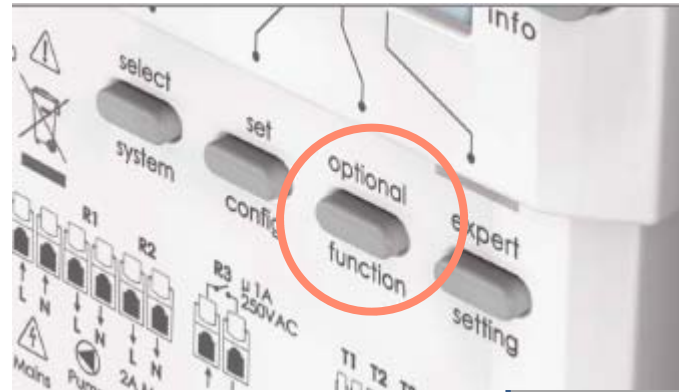
The SolarLogic  
Controller

Part 3



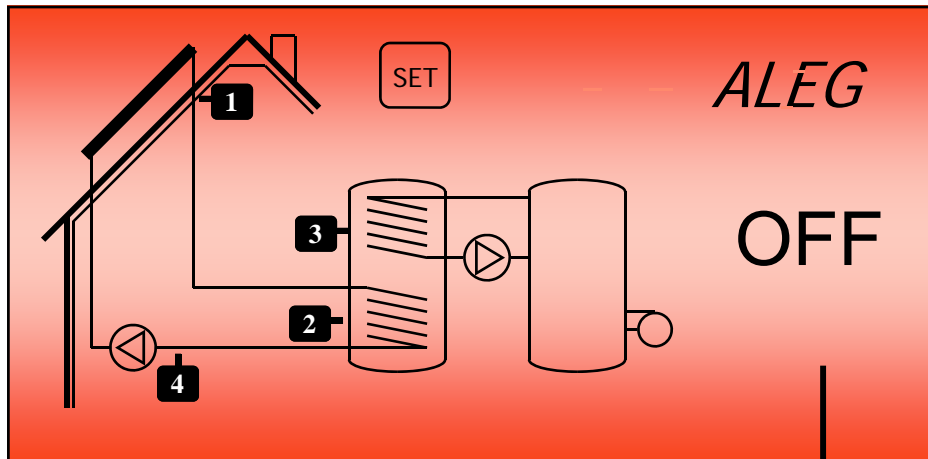
key words

The 'optional' functions



Installer settings





or ON

To activate the Anti-Legionella function,

Press **'SET'**, then **+** or **-** keys to change

and **'OK'** to save.

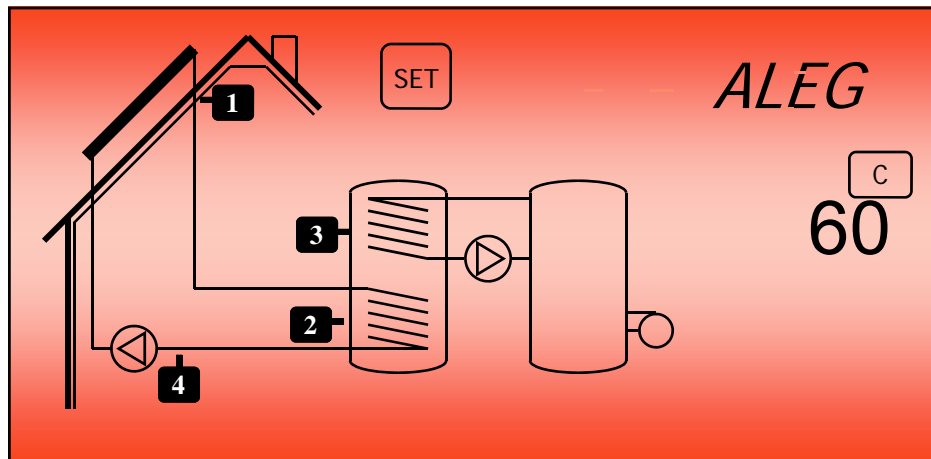
Anti-Legionella  
function





If selecting Anti-Legionella function, the next step is to set the pasteurise temperature.

Choose from 60C, 65C or 70C



Select the temperature with the + or - keys to change

and 'OK' to save. The next option will appear

key words

STEP 1  
continued

## Anti-Legionella function





### Notes

The AL function is triggered by information from the diagnostics programs record temperatures based by the last 24 Hr period .

It starts 1h after the Off-Peak Period has started (OFPP + 1h) or at 1am (night) if no Off-Peak Period

**On systems 1 and 2, the R2 relay will also come on to give the option of running a secondary re-circulation pump to distribute heat evenly across the cylinder**

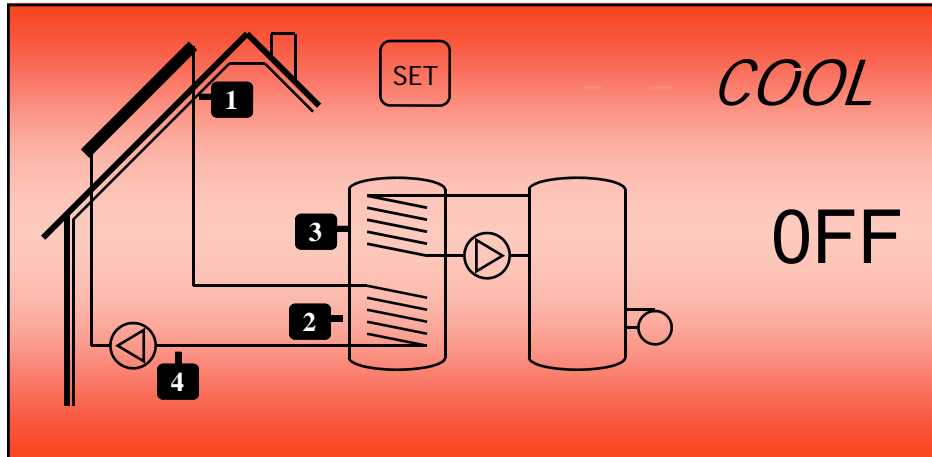
**When both HYD and ELEC auxiliary are programmed, the HYD (BOILER or R2) will serve the AL function**

key  
words

**STEP 1**  
continued

## Anti-Legionella function





To choose the COOL function ON or OFF

Press **'SET'**, then **+** or **-** keys to change

and **'OK'** to save.

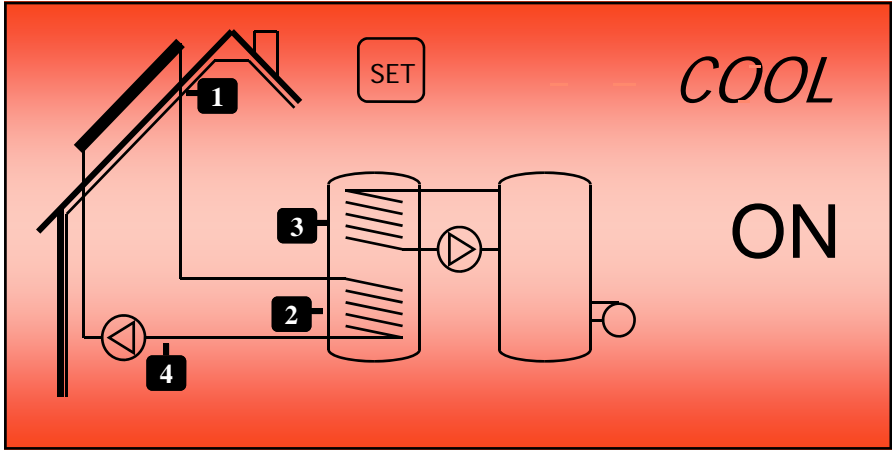
key  
words

## STEP 2

### COOL function



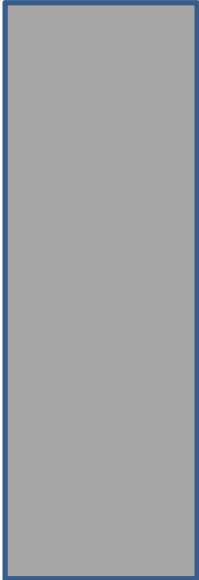
If the system **COOL** function is set to **ON**



Then the SOLAR pump R2 will be turned on as soon as the solar collector temperature reaches T1 MAX (to be found in the EXPERT settings)

This cools the COLLECTOR by putting extra heat into the cylinder and pipework.

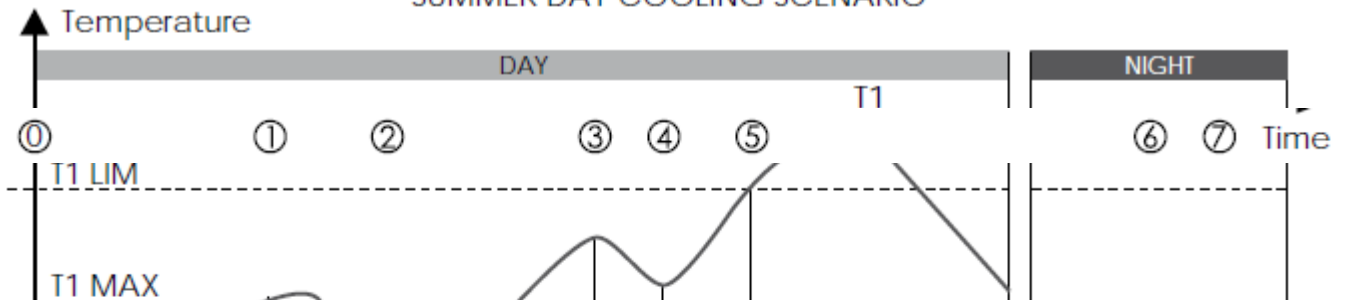
But when the Cylinder reaches T2MAX the pump stops



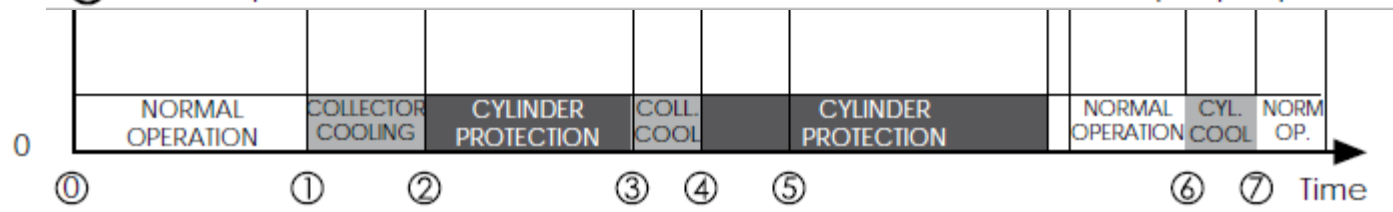


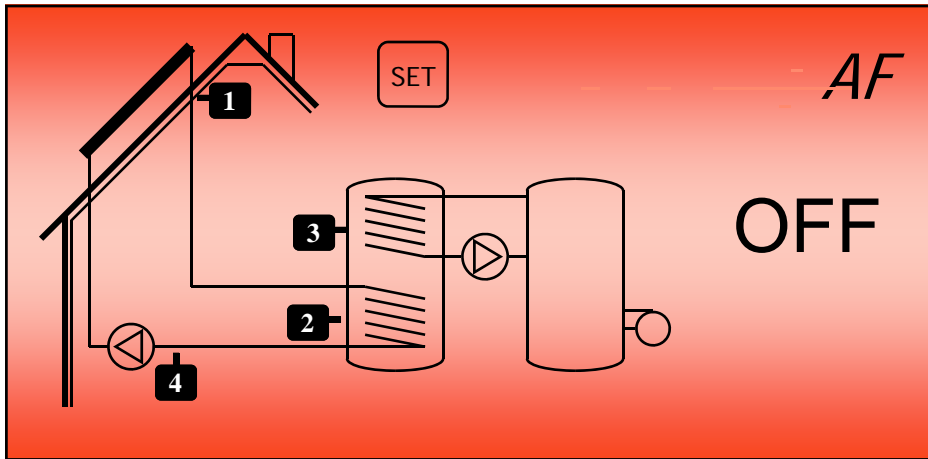
### COOL function

SUMMER DAY COOLING SCENARIO



- ① T2 is about to reach T2 SET temperature setpoint.
- ① T1 reaches T1 MAX temperature limit, the solar pump starts running to cool down and protect the collector (this will warm up the cylinder which is allowed up to T2 MAX temperature security limit).
- ② T2 has attained T2 MAX, the solar pump is not allowed anymore to run in order to prevent overheating inside the cylinder.
- ③ Some hot water is drawn from the water cylinder, T2 decreases, the pump can run again in order to cool the collector.
- ④ T2 increases to T2 LIM again, the solar pump stops in order to protect the cylinder.
- ⑤ T1 exceeds T1 LIM, the controller cannot stop this progression, the expansion vessel represents the very last protection for the collector.
- ⑥ At night, T1 drop below T2 (the switch-on threshold is T2-dTON), the pump runs to cool the cylinder since T2 is above T2 SET.
- ⑦ T2-T1 temperature difference decreases down to dTOFF switch-off threshold, the pump stops, etc...





To achieve the 'WARMING' and FROST PROTECTION of the solar collector...

The SolarLogic controller switches on the Solar Pump at R2

The fluid now circulating from the hot water store will transfer enough heat to warm the solar collector

key words

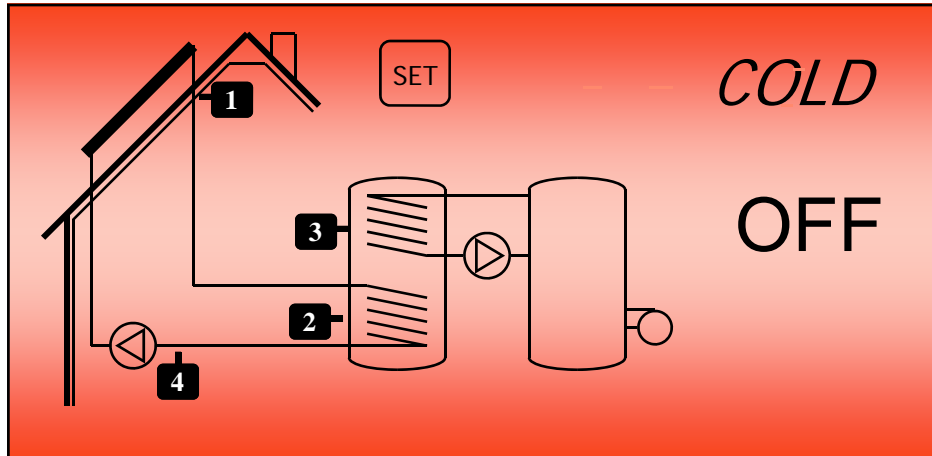
## STEP 3

Anti-Freeze Function

WARMS the collector when the temperature falls below 4C

Pump turns OFF at 7C





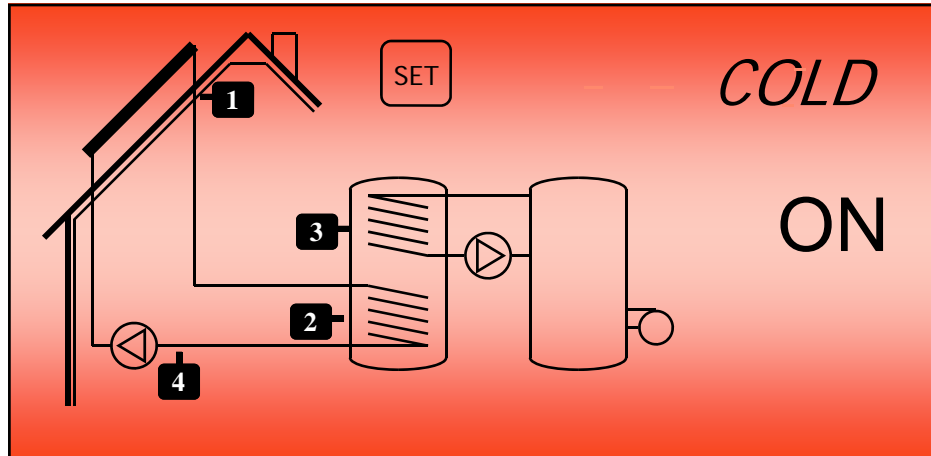
COLD START  
function

To activate the COLD start function

Press **'SET'**, then **+** or **-** keys to change

and **'OK'** to save.





COLD START  
Function

ON

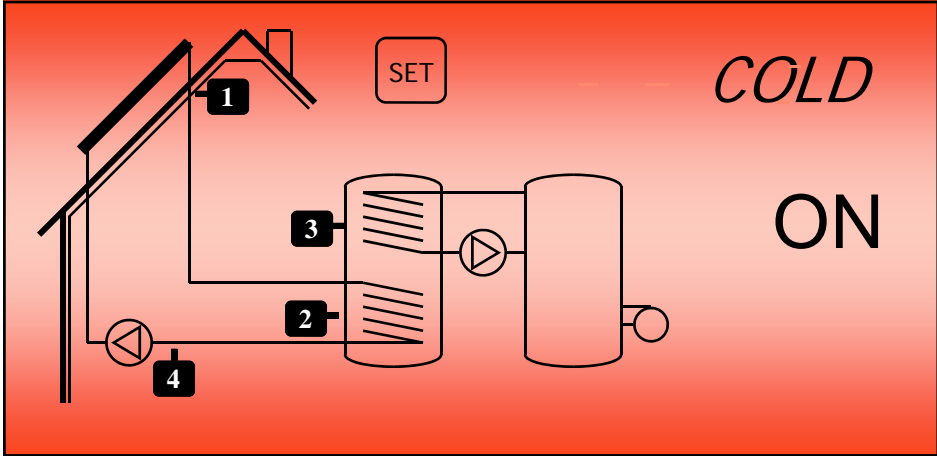
The **COLD START** function is....

automatic control of the **dT** (temperature difference between the collector (**T1**) and the hot water storage (**T2**)).



key words

## STEP 4



Function is more effective for colder climates or UK mid winter severe temperatures

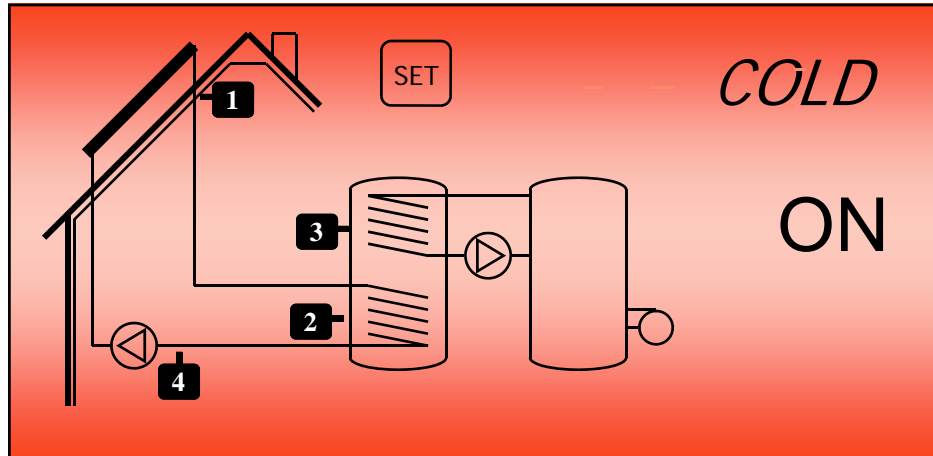
COLD START Function

ON



key words

## STEP 4



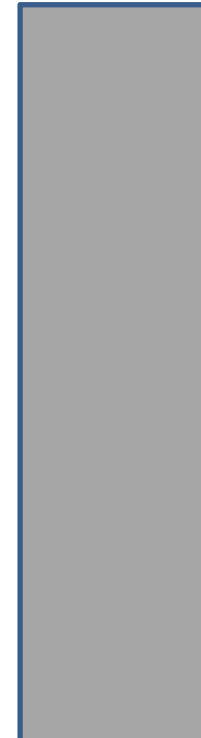
When the temperature of the solar collector falls to a set value temperature called **T1 COLD**

**T1 COLD**

Factory set to 4C

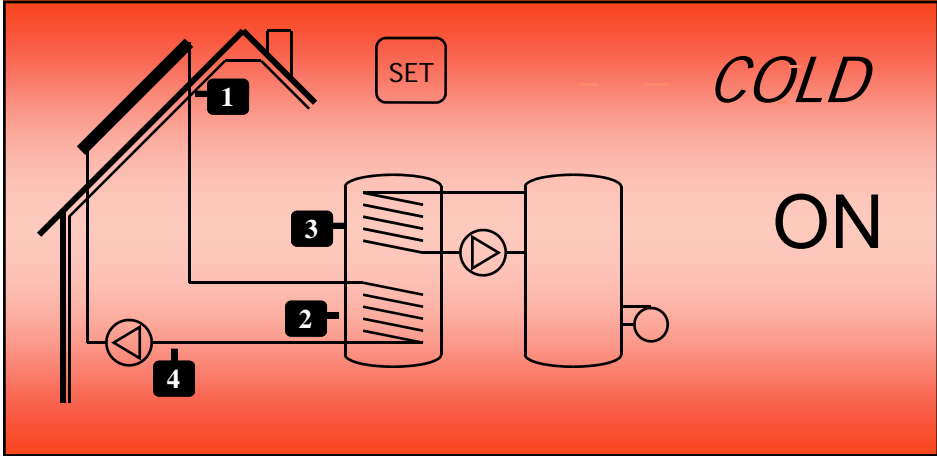
But is adjustable

between -10 C and + 10C



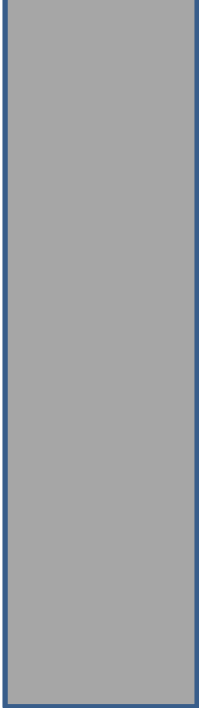
key words

## STEP 4



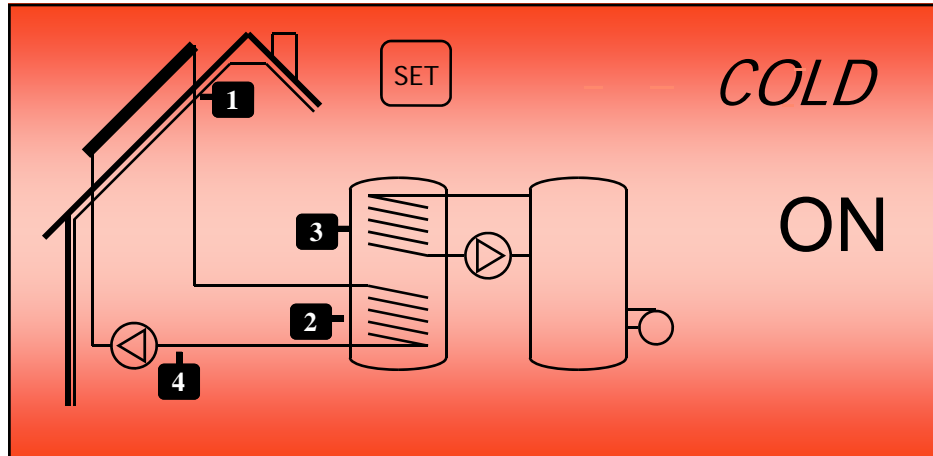
THE dT between T1 and T2 will automatically change to 10C.

*AND, the solar pump (R2) has not run for 3 hours.....*



key words

## STEP 4

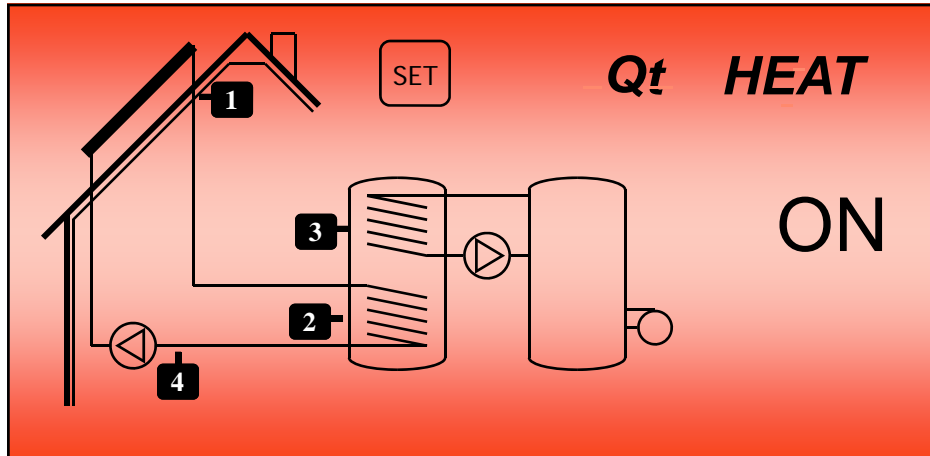


COLD START  
Function

ON

- Prevents unproductive starts
- Prevents cold fluid in long pipe runs being 'shunted' short distances.
- Prevents HW cylinder cooling in cold weather





To activate the Heat Quantity  
Measuring function,

Press **'SET'**, then **+** or **-** keys to change

and **'OK'** to save.

Metering and  
measuring your  
solar energy gains

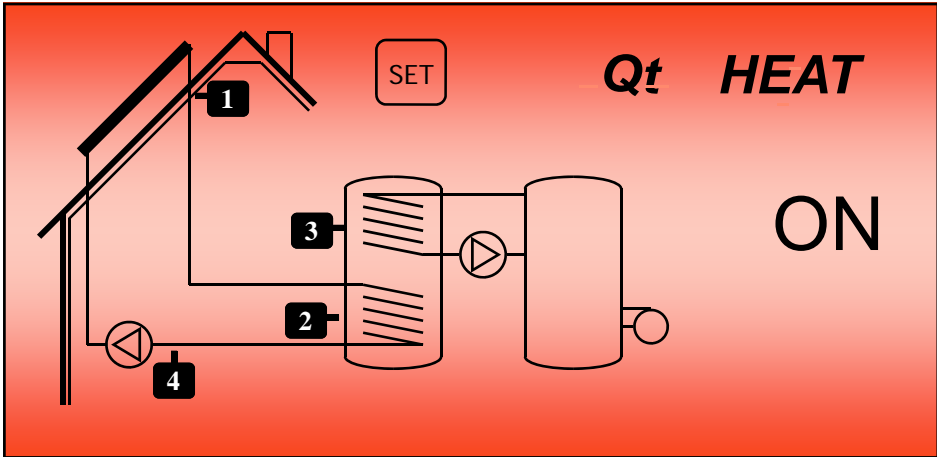




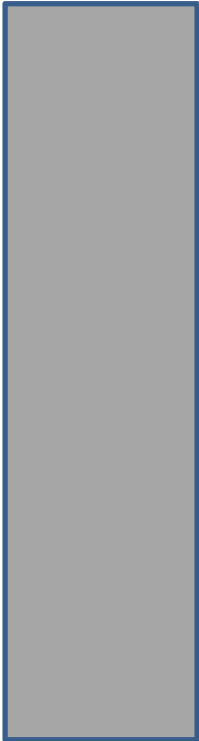
key words

# STEP 5

Metering and measuring your solar energy gains



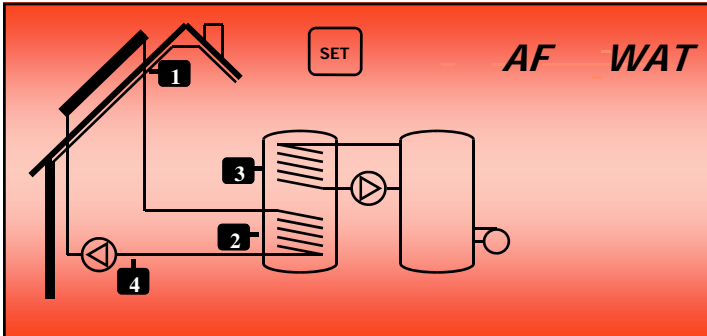
SolarLogic T4 temperature Sensor  
Or  
PT1000 Low Temp Sensor  
Part Code SOPR002



Additional data analysing by the controller for more accurate heat quantity measurement.

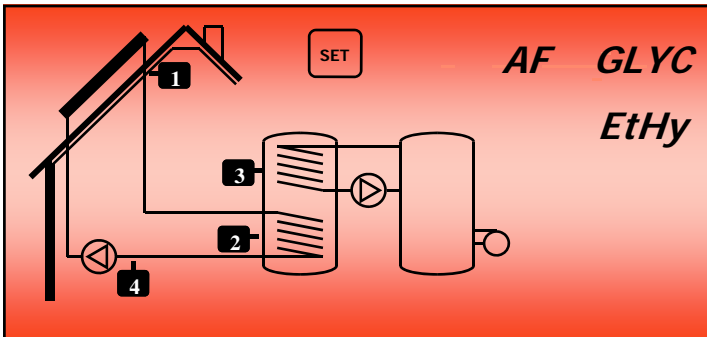
- System Fluid type
- Anti freeze concentration %
- Flow rates set for the system





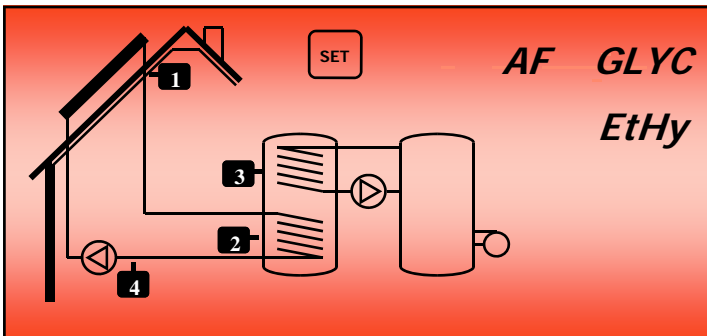
*Is the fluid  
WATER  
Only?*

to select, press **'SET'**,  
then **+** or **-** keys to change  
and **'OK'** to save.



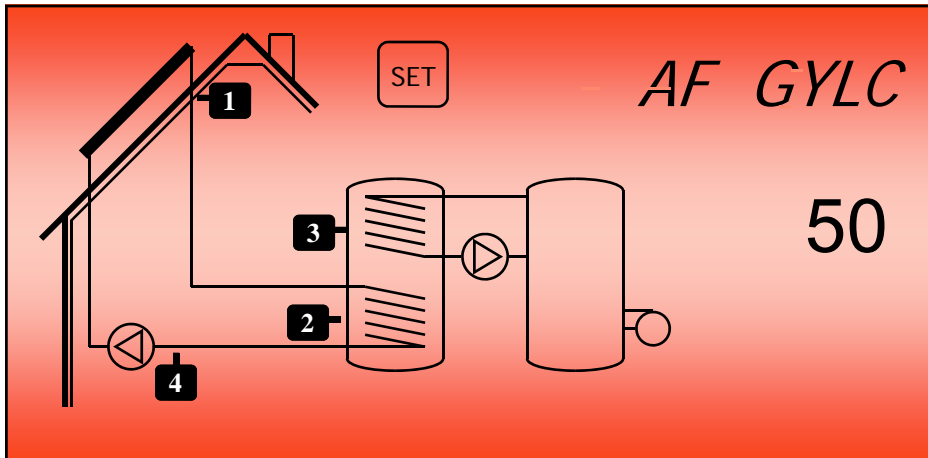
*Is the fluid  
GLYCOL  
(Ethylene)*

If water then moves on to  
flow rate



*Is the fluid  
GLYCOL  
Propylene?*





To enter the know % glycol mix (20% to 80%)

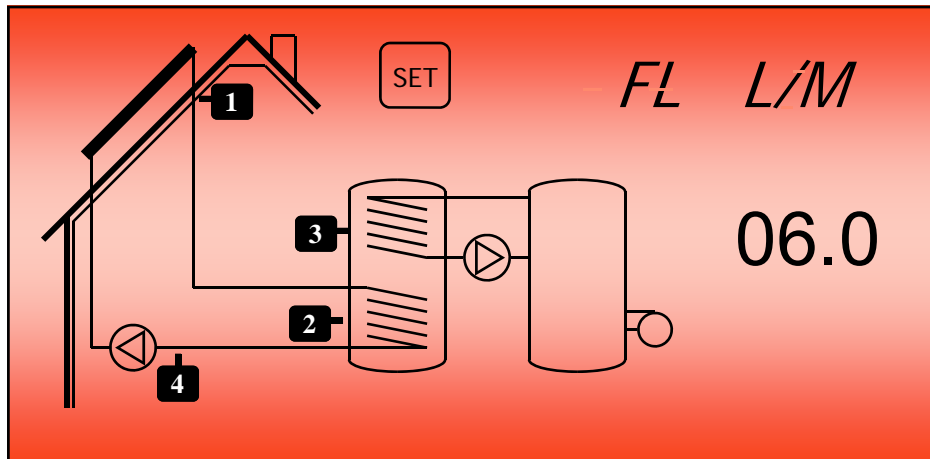
Press **'SET'**, then **+** or **-** keys to change

and **'OK'** to save.

Antifreeze  
Concentration  
%

If 'glycol' options set





Record on to the controller the flow rate that has been set on the pump station flow regulator

To enter the flow rate setting:

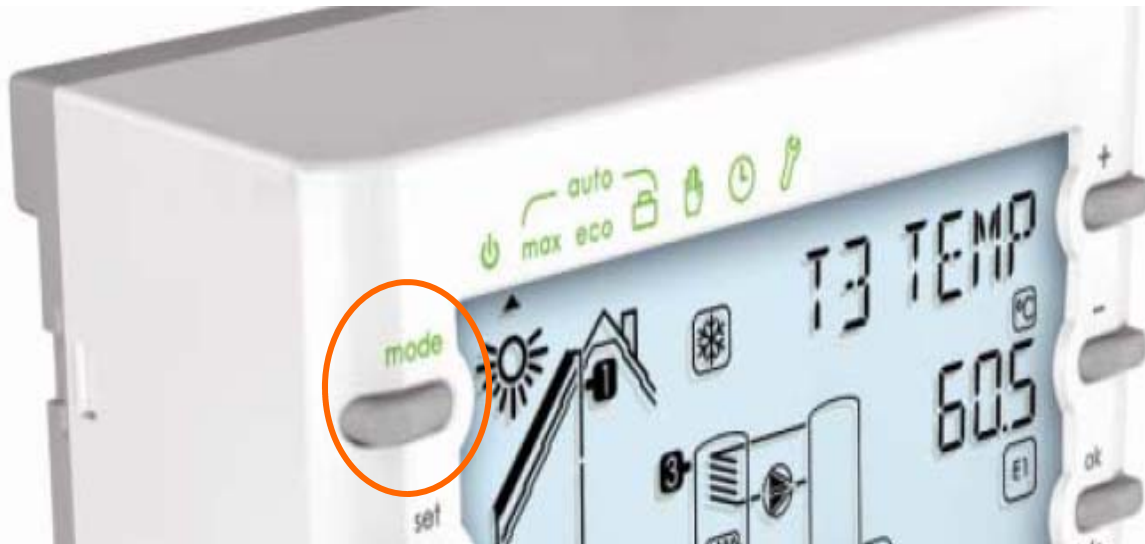
Press **'SET'**, then **+** or **-** keys to change

and **'OK'** to save.



# solarlogic

key  
words



## FINISH

Press the MODE key to return to automatic operation .



inta ECO

# solarlogic

key  
words



## End of Part 3



inta ECO