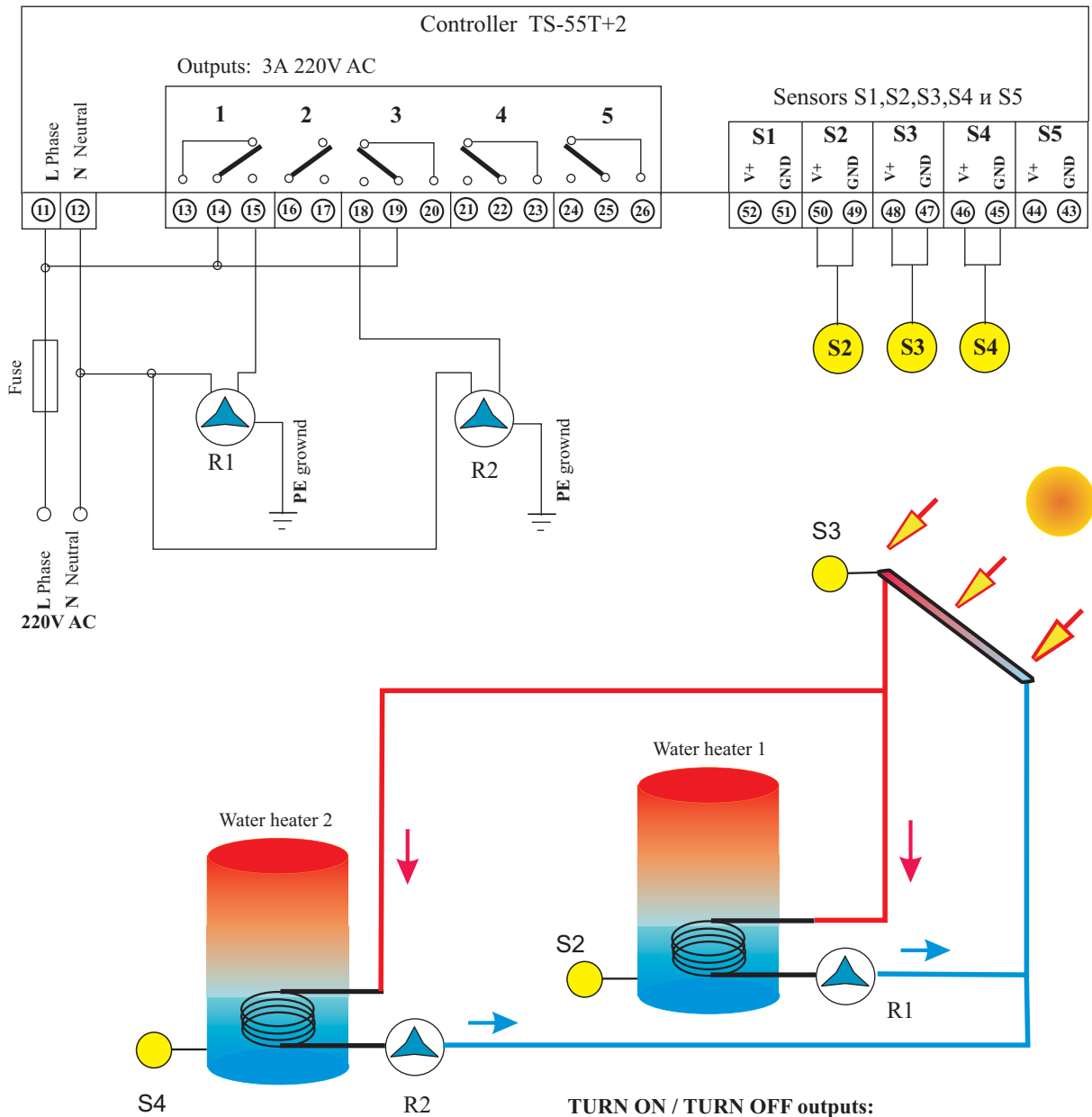


**Control two boilers each with one coil, from one alternative heat source.
Protection of the heat source from overheating and freezing.**



TURN ON / TURN OFF outputs:

Output 1:

- If $(S3-S2) > 10$ or $S3 > 90$ or $S3 < 5$ then the output is TURN ON.
- If $(S3-S2) < 3$ and $S3 < 90$ and $S3 > 5$ then the output is TURN OFF.
- If $(S3-S4) > 15$ or $S3 > 90$ or $S3 < 5$ then the output is TURN ON.
- If $(S3-S4) < 3$ and $S3 < 90$ and $S3 > 5$ then the output is TURN OFF.

By appropriate selection of the set temperature differences can be giving priority to the boiler 1 or 2 (more or less) .

R1, R2-Pumps
S2, S3, S4-Sensors

Programming:

1. Set the time and date.
2. Set the timer program if necessary.
3. Program the top table in the controller.
4. Perform calibration of the sensors.
5. Select "Automatic mode".

We will use:

- The conditional differential output of channel 1
- Logical function "OR" for channel 1.
- The conditional differential output of channel 3.
- Logical function "OR" for channel 3.

The below 2 rows of functional table must be set as follows:

(You only need to enroll only numbers with circle - the other is established by RESET.)

	1	2	3	4	5	6	7	8
Td1-8: Td1,Td2,Td3 Td4,Td5,Td6,Td7,Td8	05	05	05	05	05	05	05	05
U1-8: u1 u2 u3 u4 u5 u6 u7 u8	0	0	0	0	0	0	0	0

u1-u8 are the numbers of outputs, used into timers 1 to 8. If the output is different from '0' then the corresponding row is used by the clock time, for set indication output. Ux must be from 0 to 5.

This table should be write into the controller as using functional table (see TS-plus2).

You only need to enroll only numbers with circles (the other is established by RESET).

Table setup of the differential regulators, logical functions and thermostats						
Row from the table for programming	Output number:					Note
	1	2	3	4	5	
Top Level - °C Top level thermostats XX=2 до 90°C	90	90	90	90	90	Temperature to TURN ON the conditional output of the thermostat
Top Level-Sensor S Sensor for thermostat top level S=0-6	3	0	3	0	0	
Low Level - °C Low level thermostats XX=2 до 90°C	05	05	05	05	05	Temperature to TURN ON the conditional output of the thermostat
Low Level-Sensor Sensor for thermostat top level S=0-6	3	0	3	0	0	
Differential regulator ON TEMPERATURE 2 - 90°C	10	05	15	05	05	Temperature difference ST-SP to TURN ON the conditional output of the regulator
Differential regulator OFF TEMPERATURE 2 - 90°C	03	02	02	02	02	Temperature difference ST-SP to TURN OFF the conditional output of the regulator
Differential regulator sensor ST 0 - 6	3	0	3	0	0	Sensor heat source *
Differential regulator sensor SP 0 - 6	2	0	4	0	0	Sensory hot-receiver *
Used logical function AND, OR	0	0	0	0	0	A(AND) / O(OR)

* - Do not put ST = SP !