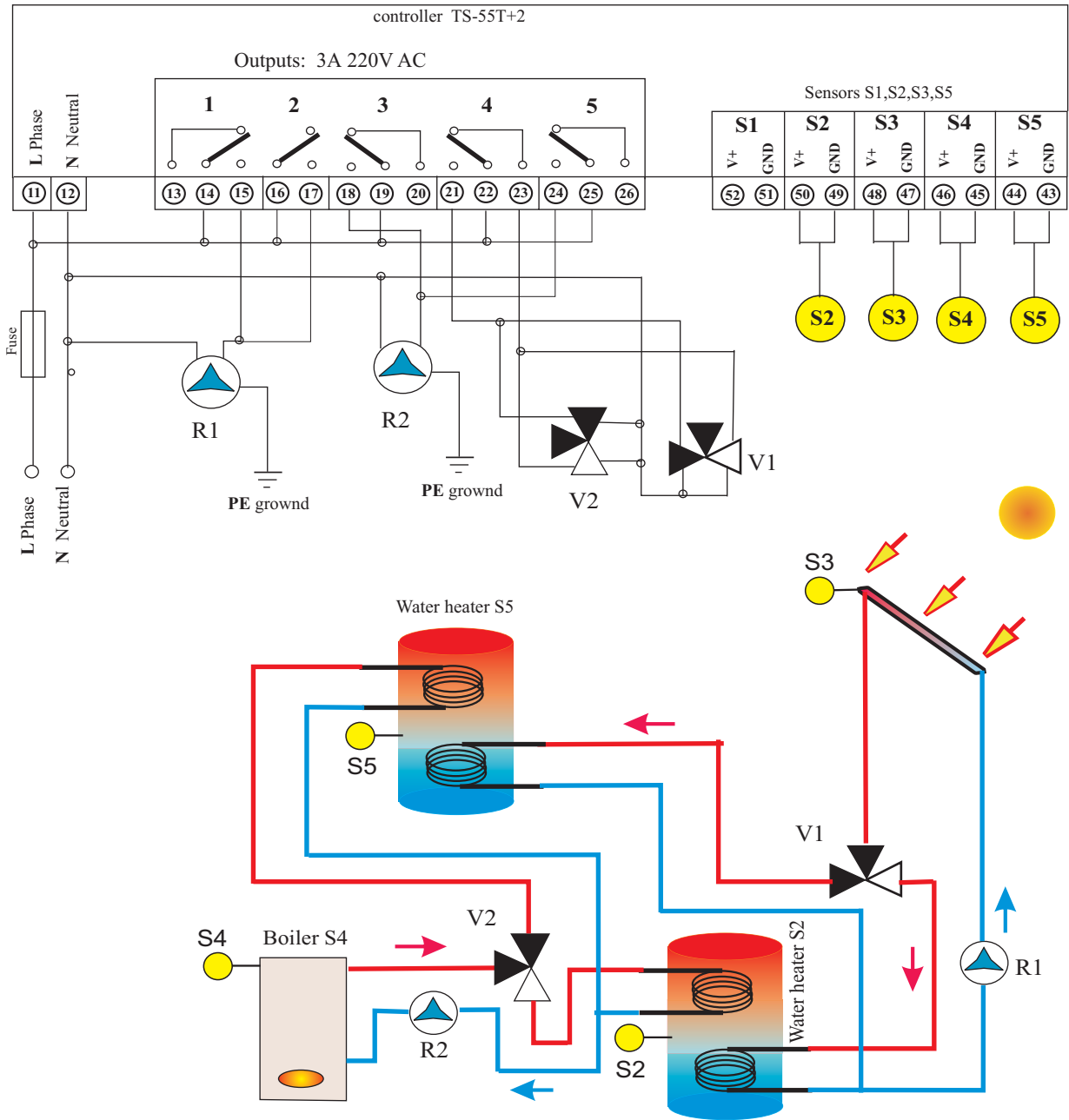


**Management of two boilers with two pumps and two three-way valve.  
Each water heater has two coils.**

**Electric scheme**



Water heater S2 will anticipate water heater S5 with 6 degrees.

**TURN ON / TURN OFF outputs:**

**Output 1:**

If  $(S3-S2) > 6$  then the output is TURN ON.  
If  $(S3-S2) < 3$  then the output is TURN OFF.

**Output 2:**

If  $(S3-S5) > 10$  then the output is TURN ON.  
If  $(S3-S5) < 4$  then the output is TURN OFF.

**Output 3:**

If  $(S4-S2) > 6$  then the output is TURN ON.  
If  $(S4-S2) < 3$  then the output is TURN OFF.

**Output 4:**

If  $(S2-S5) > 12$  then the output is TURN ON.  
If  $(S2-S5) < 2$  then the output is TURN OFF.

**Output 5:**

If  $(S4-S5) > 10$  then the output is TURN ON.  
If  $(S4-S5) < 4$  then the output is TURN OFF.

**Switching valve to supply water to the water heater S5.**  
**Switching valve to supply water to the water heater S2.**

**Programming:**

1. Set the time and date.
2. Select "Automatic mode".

V1, V2 - Three-way electrical valve.

R1, R2 - Heat pumps

S2, S3, S4 S5 - Sensors

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	0	0	0	0	0	
Low Level - °C Low level thermostats XX=2 до 90°C	05	T <sub>min</sub> 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	0	0	0	0	0	
Differential regulator ON TEMPERATURE 2 - 90°C	6	10	6	12	10	Temperature difference ST-SP to TURN ON the conditional output of the regulator
Differential regulator OFF TEMPERATURE 2 - 90°C	3	4	3	2	4	Temperature difference ST-SP to TURN OFF the conditional output of the regulator
Differential regulator sensor ST 0 - 6	3	3	4	2	4	Sensor heat source *
Differential regulator sensor SP 0 - 6	2	5	2	5	5	Sensory hot-receiver *
Used logical function AND, OR	0	0	0	0	0	A(AND) / O(OR)

\* - Do not put ST = SP !