



SERVICE MANUAL

SLIMJIM

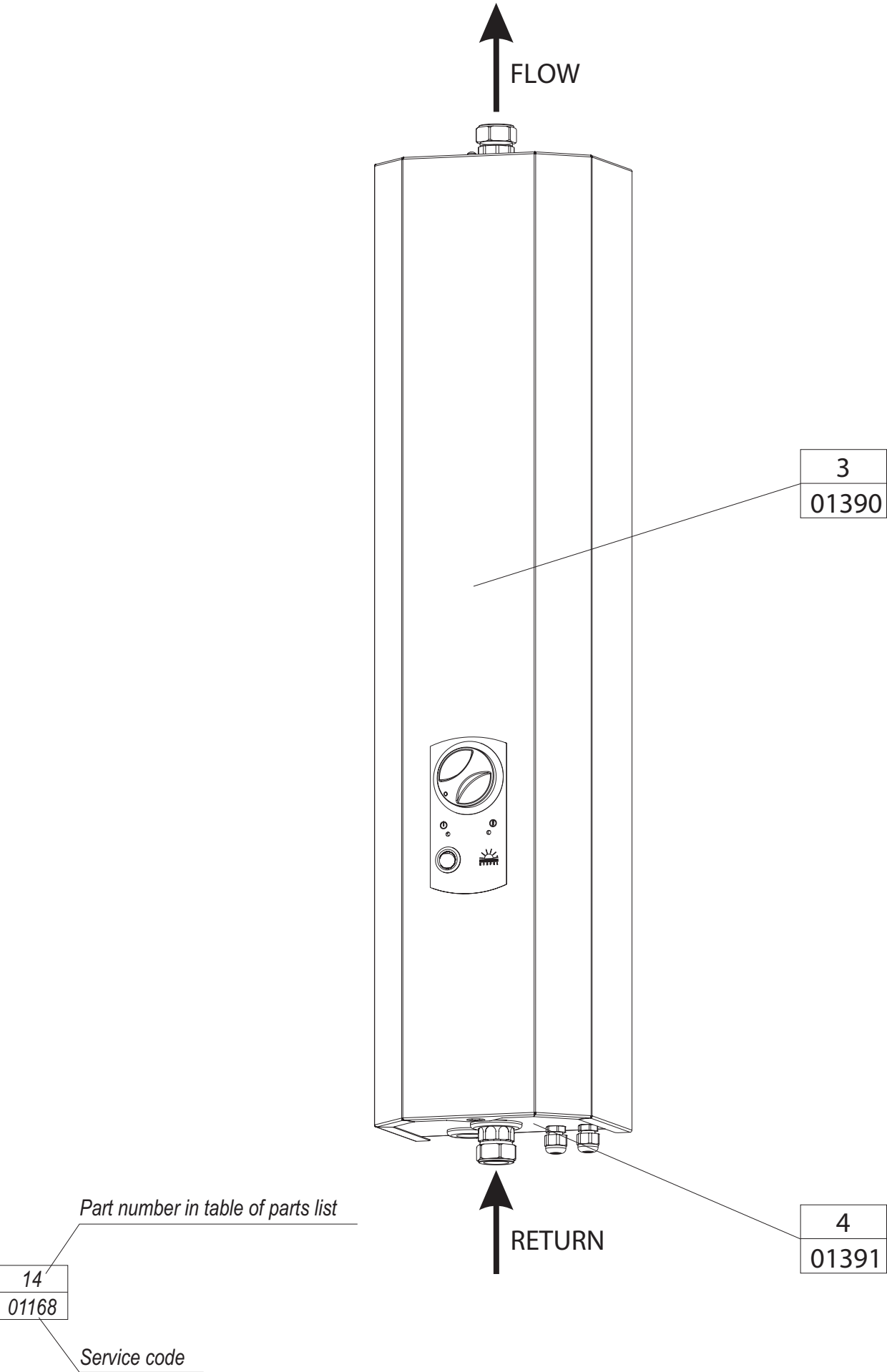
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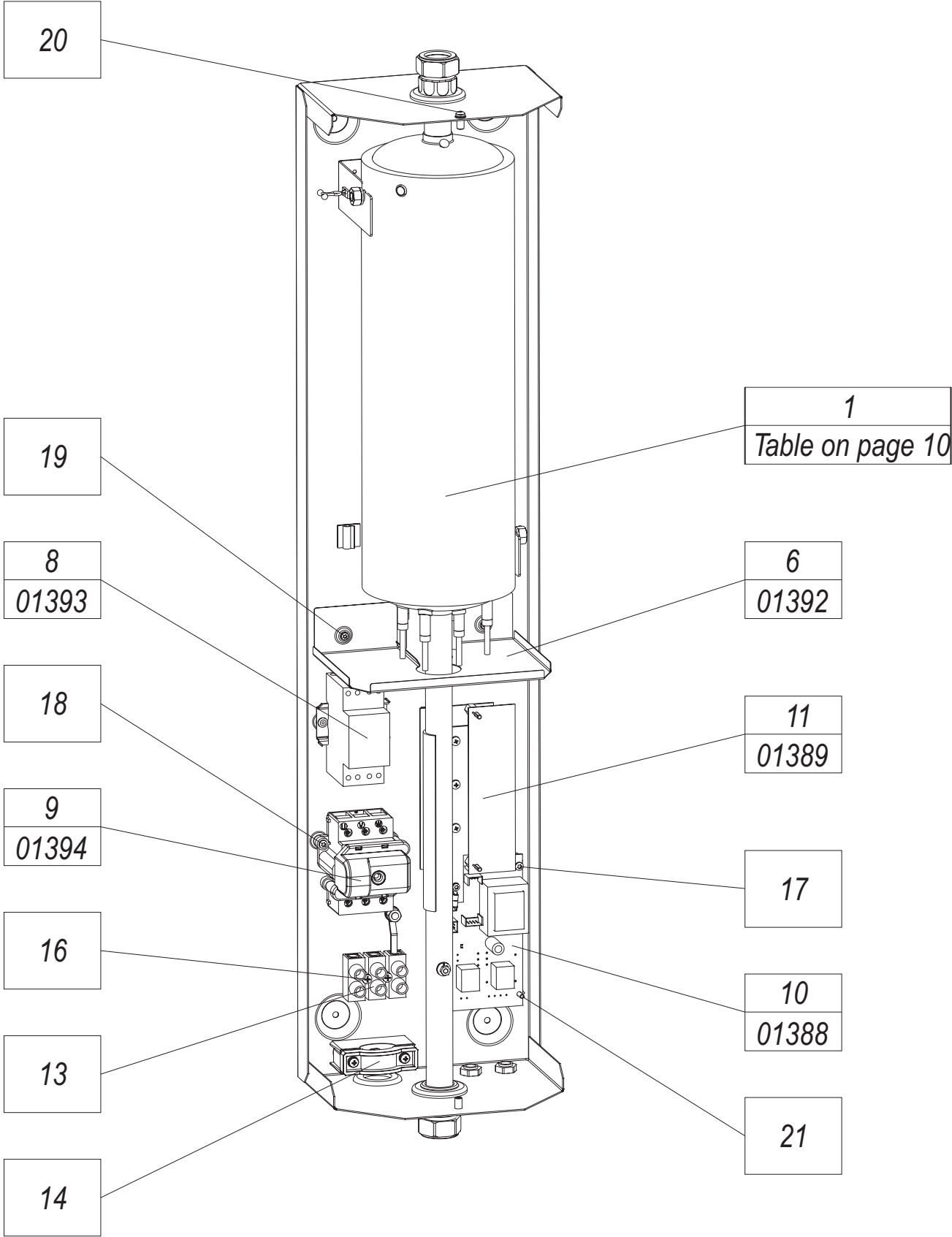
1. Exterior view of boiler.

Pic.1. Exterior view.



2. Interior view of boilers.

Pic.2. Interior view.



3. Heating box.

Pic.3. Heating box.

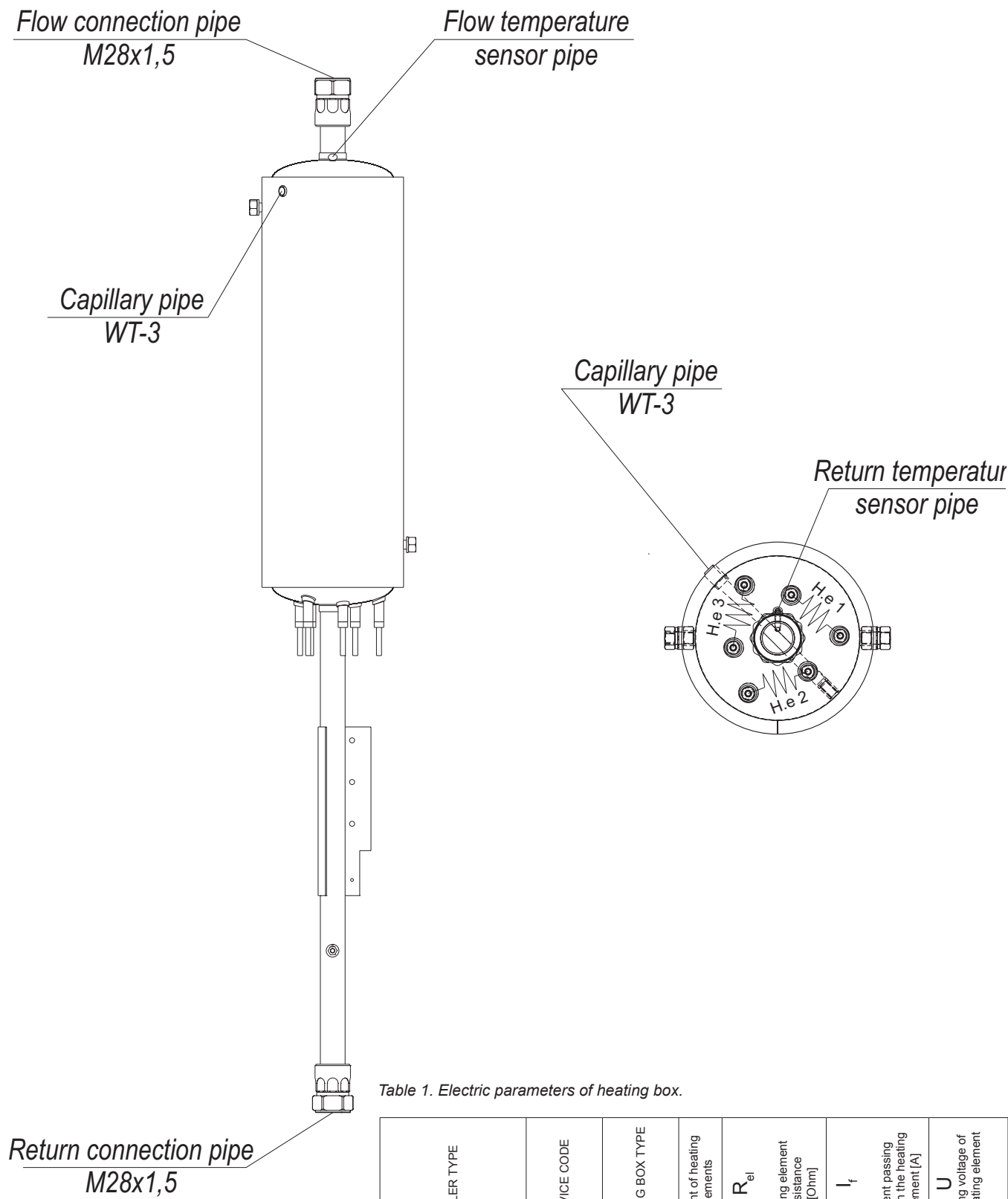
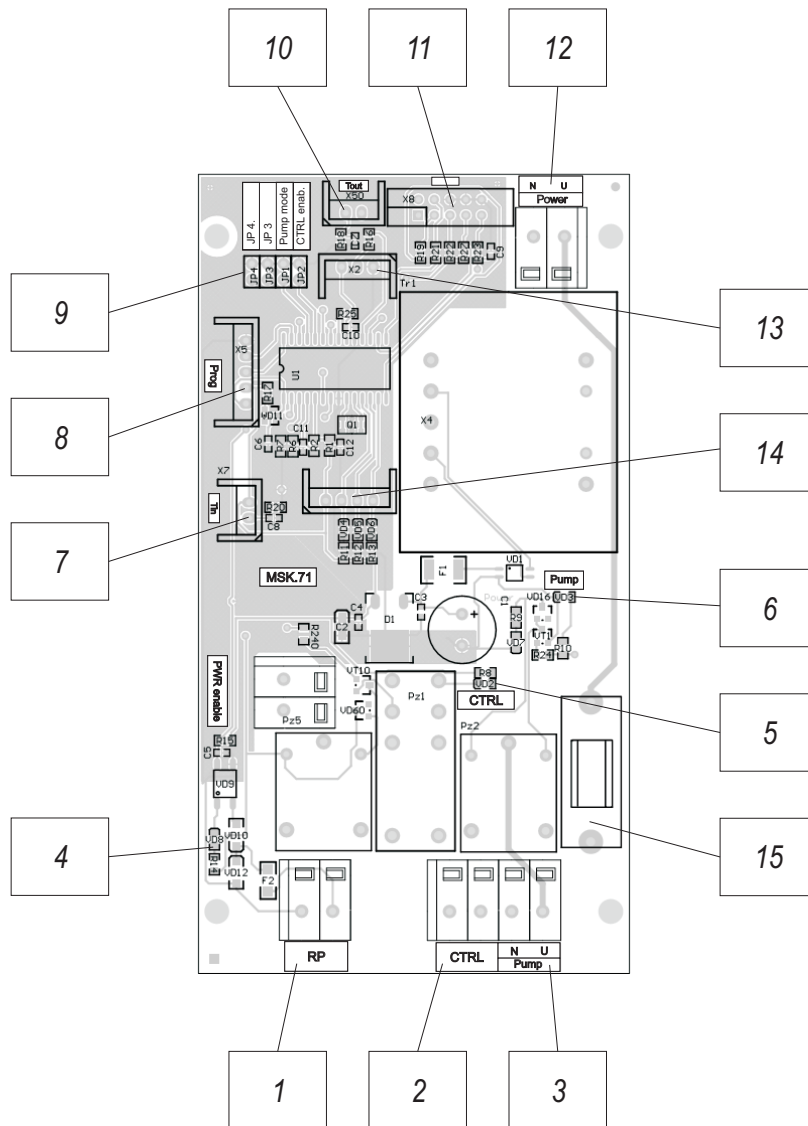


Table 1. Electric parameters of heating box.

BOILER TYPE	SERVICE CODE	HEATING BOX TYPE	Amount of heating elements	R_{el} Heating element resistance [Ohm]	I_f Current passing through the heating element [A]	U Working voltage of the heating element
EKCO.A-4	01383	wyk.001	3	$37,1 \div 40,9$	$5,6 \div 6,2$	240
EKCO.A-7	01384	wyk.002	3	$24,8 \div 28,6$	$8,0 \div 9,3$	
EKCO.A-10	01385	wyk.003	3	$37,1 \div 40,9$	$5,6 \div 6,2$	
EKCO.A-12	01386	wyk.004	3	$24,8 \div 28,6$	$8,0 \div 9,3$	
EKCO.A-14,4	01387	wyk.005	3	$18,6 \div 20,4$	$11,3 \div 12,4$	

4. MSK-71 Board.

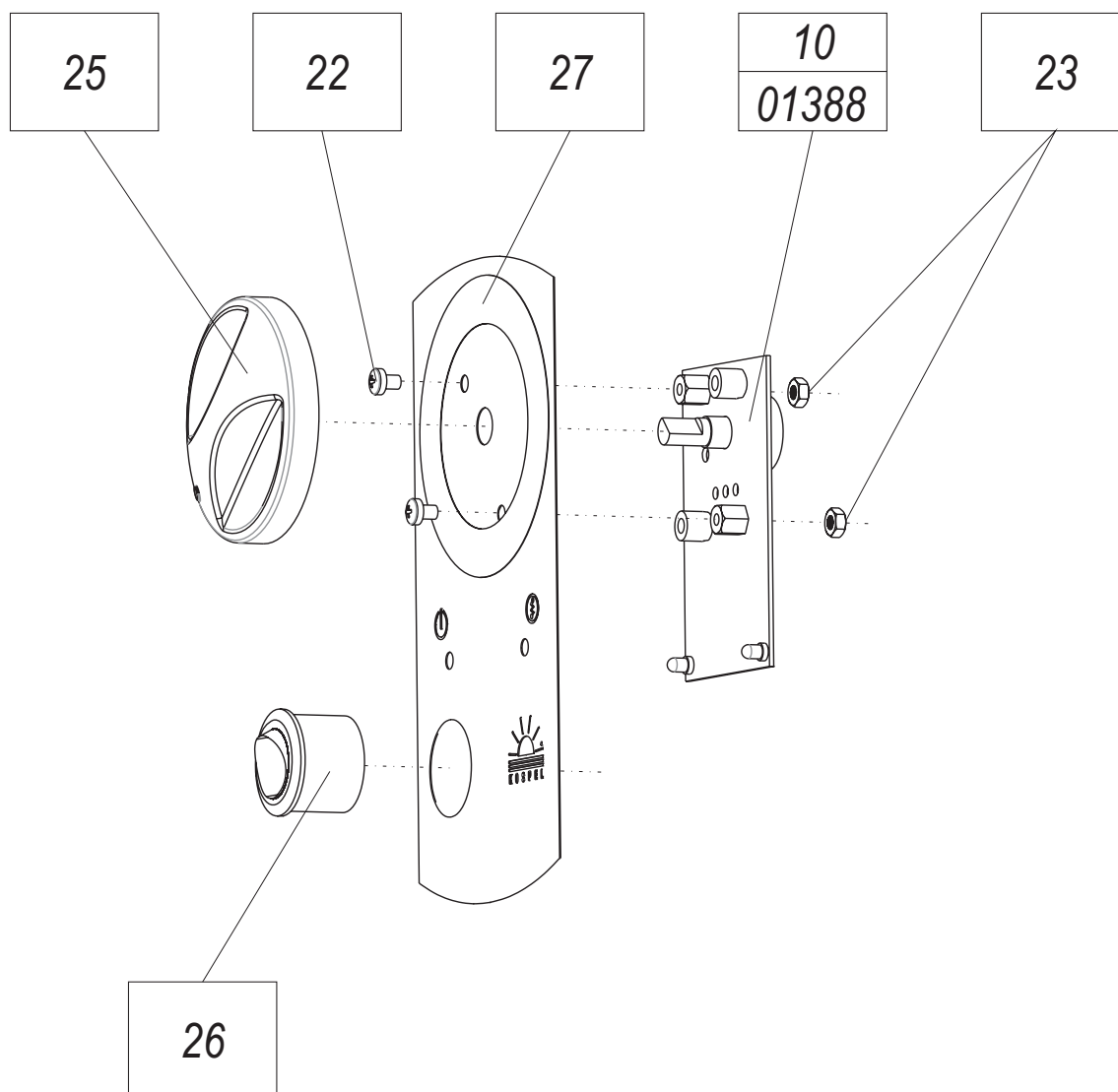
Pic4. MSK-71 Board.



- | | |
|--|---------------------------------------|
| 1. RP - room stat connector | 12. MSK-71 supply connector |
| 2. CTRL - exterior driving voltage connector (230-240V) | 13. Tester socket |
| 3. Pump - circulating pump connector | 14. Power board socket |
| 4. LED - room stat indicator | 15. Circulating pump fuse (1A) |
| 5. LED CTRL - exterior driving voltage indicator | |
| 6. LED Pump - pump mode indicator | |
| 7. Tin - return temperature sensor socket | |
| 8. Prog - programming socket | |
| 9. Group of configuration jumpers: | |
| CTRL enab. - exterior control voltage mode (230-240V): | |
| close - active mode | |
| open - disable | |
| Pump mode - circulating pump mode: | |
| close - continuous work | |
| open - automatic work | |
| JP3 - not active | |
| JP4 - not active | |
| 10. Tout - flow temperature sensor socket | |
| 11. PW-12 Indicator board connector | |

5. Control panel.

Pic.5. Control panel - PW-12 board.



1 - Power switch

2 - Temperature setting knob (30 - 80 °C)

3 - Green LED - power indicator.

Shining - boiler is running

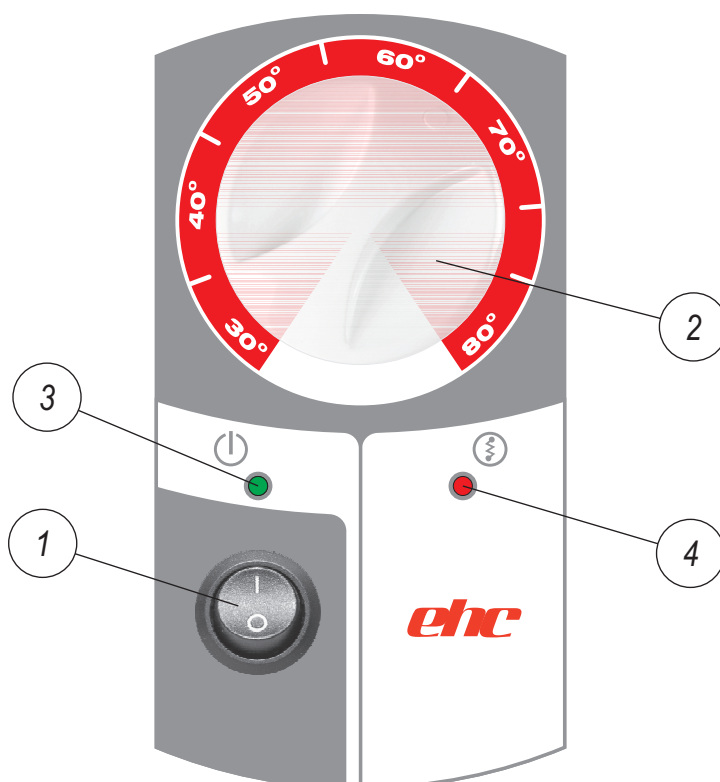
Blinking - boiler is turned off but pump is still working (pump turns off after 90 second boiler)

4 - Red LED - heating indicator.

Shining - heating enabled

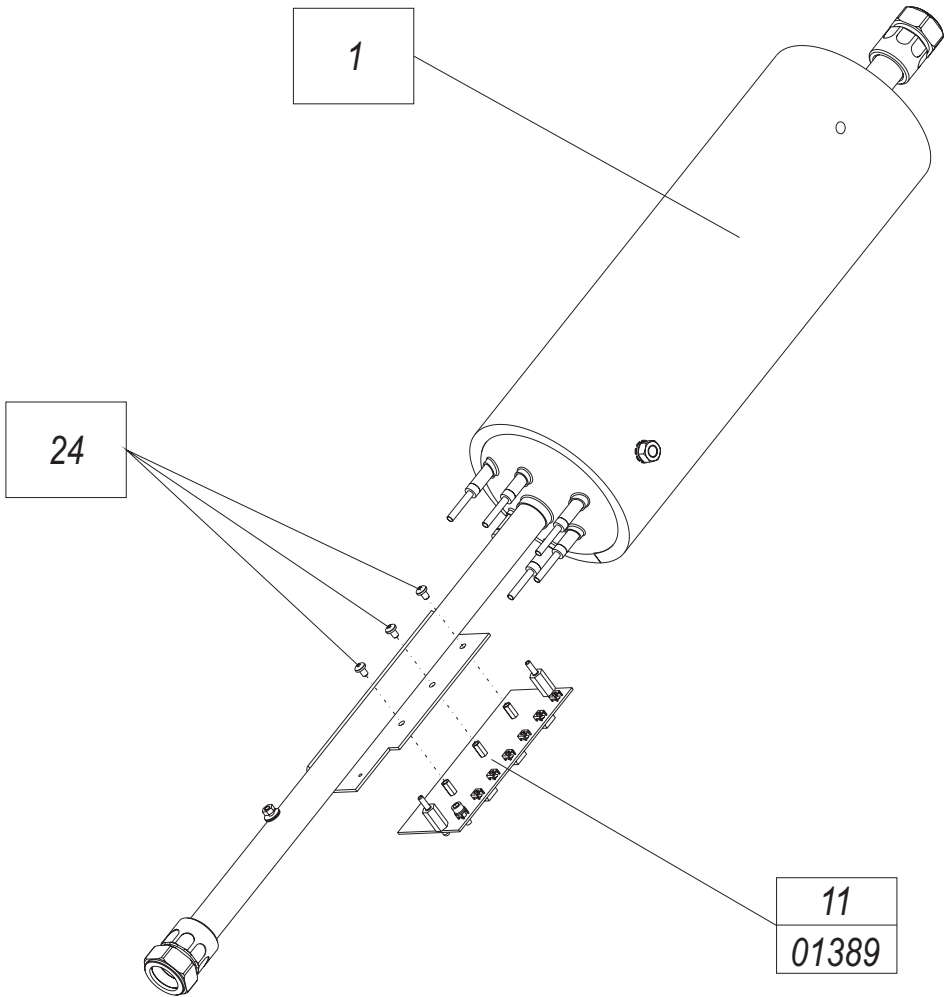
Blinking - temperature sensor failure (flow or/ and return)

LED indicator is blinking even if switch is in 0 position



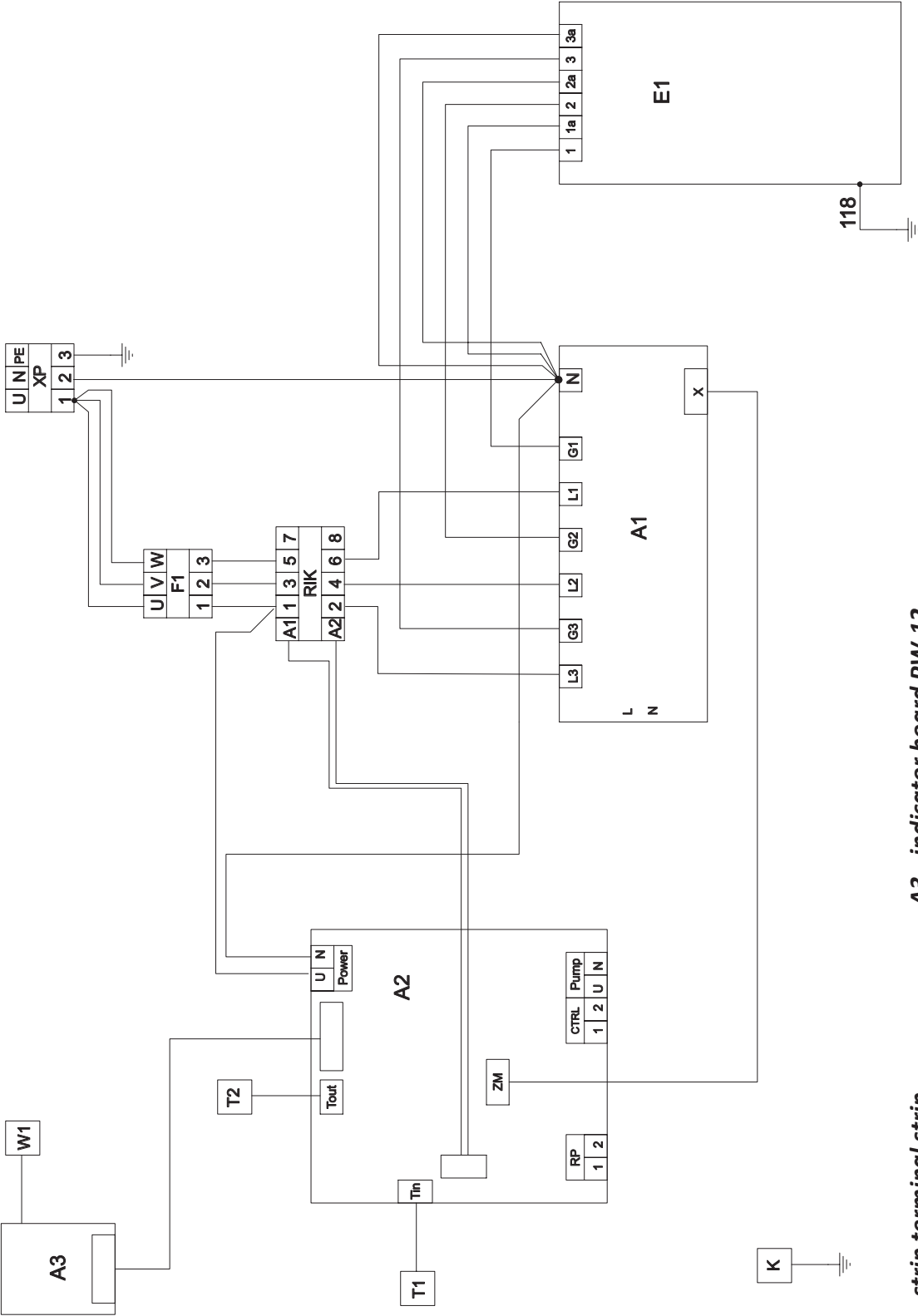
6. Power board dismantling.

Pic.6. Power board dismantling.



7. Electrical diagram.

Rys.7. Electrical diagram.



- XP** - strip terminal strip

F1 - WT-3 cut-out

RIK - contactor

A1 - power board EKCO.A

A2 - MSK-71 Board

E1 - heating box EKCO.A
- A3** - indicator board PW-12

T1 - return temperature sensor

T2 - flow temperature sensor

W1 - power switch

K - front cover

8. Boiler parts list.

Table 2. Parts list.

Pos.	Service code	Picture number	Part name	Amount (pcs)	Notice
1	01383	EKCO.A-01.00.00/01	Heating box EKCO.A 4kW/230V	1	E1
	01384	EKCO.A-01.00.00/02	Heating box EKCO.A 7kW/230V		
	01385	EKCO.A-01.00.00/03	Heating box EKCO.A 10kW/230V		
	01386	EKCO.A-01.00.00/04	Heating box EKCO.A 12kW/230V		
	01387	EKCO.A-01.00.00/05	Heating box EKCO.A 14,4kW/230V		
2					
3	01390	EKCO.A-03.02.00	Front cover EKCO.A	1	
4	01391	EKCO.A-03.01.00	Chasee EKCO.A	1	
5	01395	PCA-PW.12/02	Indicator board PW-12 EKCO.A	1	A3
6	01392	EKCO.A-00.00.01	Interior cover EKCO.A	1	
7				1	
8	01393	01.151.0009.0	Contactor RIK25-40/230V EKCO.A	1	RIK
9	01394	WT3a-00.00.00/06	WT-3 safety cut-out EKCO.A	1	F1
10	01388	PCA-MSK.71	MSK-71 board EKCO.A	1	A2
11	01389	EKCO.A-10.00.00	Power board EKCO.A	1	A1
12				1	
13			Thread connector EKL5E/25 PA/GVVO	1	XP
14			Wire clamping	1	
15				1	
16		MARCOPOL	Screw TW 4.1x20 PZ	2	Thread connector mount
17		MARCOPOL	Screw TW 3.1x16 TX	2	MSK-71 mount
18		MARCOPOL	Screw TW 4.1x16 TX	2	WT-3 mount
19		MARCOPOL	Self-forming screw FWW M3x6 TX	2	Interior cover mount
20		PN-86/M-82202	Screw M4x8	2	Front cover mount
21		ADSYS	Element LCBS-7-01	1	MSK-71 mount
22		PN-86/M-82202	Screw M3x5	2	PW-12 mount
23		PN-86/M-82144	Nut M3	2	PW-12 mount
24			Screw M4x6	3	Power board mount
25		WP-095	Knob WP-095	1	
26		01.001.0001.0	On-off switch R13-112A	1	
27			Sticker	1	

9. Technical parameters.

Table 3. Technical parameters.

Central heating boiler EKCO.A		4	7	10	12	14,4
Max. pressure	MPa	0,3				
Min. pressure	MPa	0,05				
Out flow water temperature	°C	30 ÷ 80				
Max. water temperature	°C	100				
Overall dimensions (height x width x depth)	mm	912 x 203 x 172				
Weight	kg	~11				
Water connection	mm	22				
Safety class		IP22				
Boiler range	kW	4	7	10	12	14,4
Electric supply		240V lph 50Hz				
Load current	A	16,7	29,2	41,7	50,0	60,0
Protection	A	20	40	50	63	80
Recommended diameter of mains cable	mm ²	3x6	3x10	3x16	3x16	3x16
Max. diameter of mains cable	mm ²	3x16				
Heat output	Btu/h	13648	23884	34120	40944	49161