

# SERVICE MANUAL

## EPMH

05.04.2013

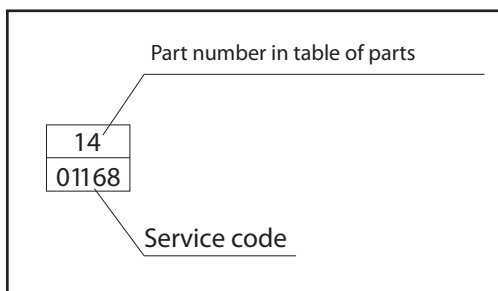
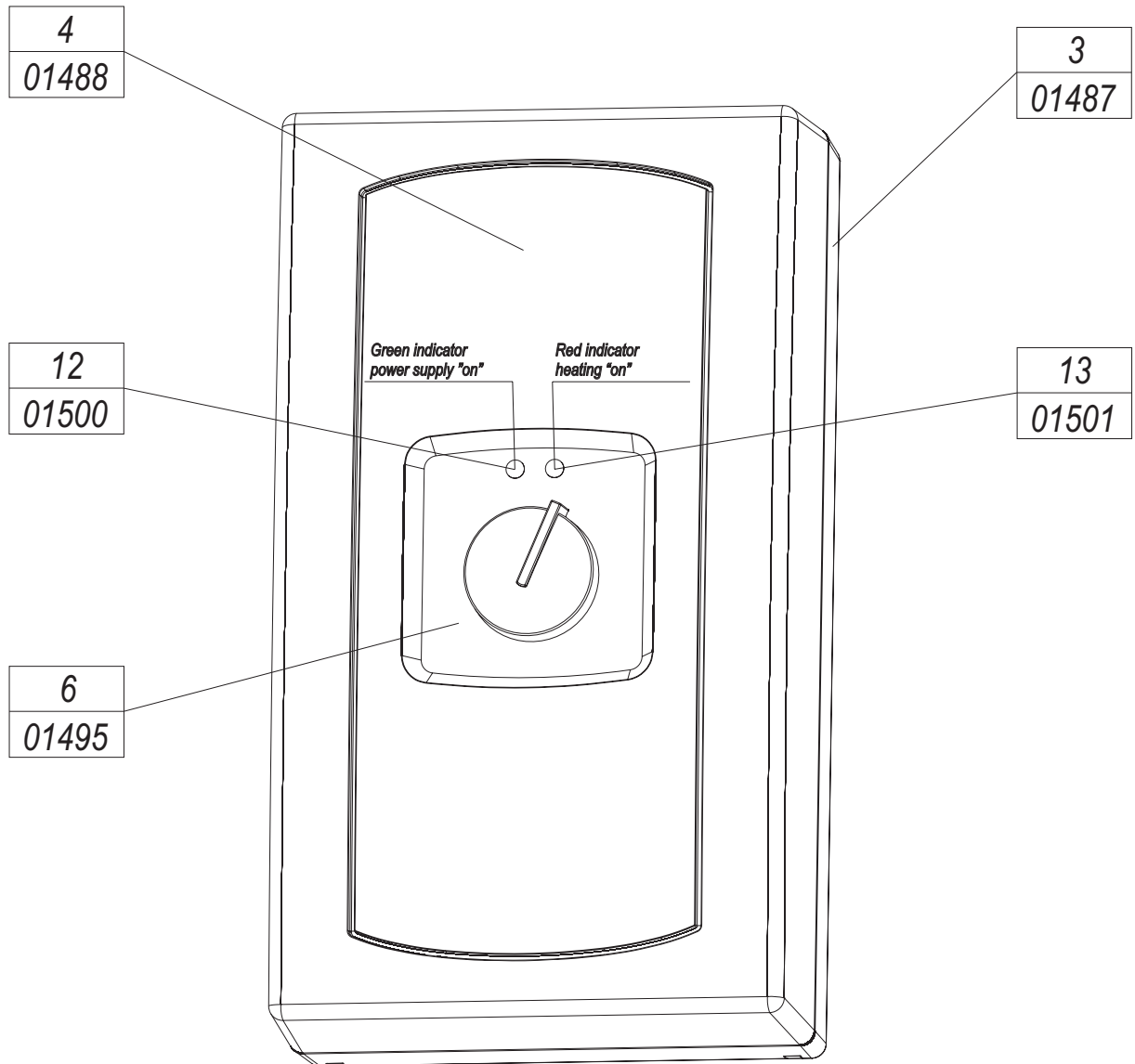
# Contens

---

<b>1. Water heater EPMH - exterior view.</b>	<b>3</b>
Pic.1. Water heater EPMH - exterior view.	3
<b>2. Construction of water heater EPMH.</b>	<b>4</b>
Pic.2. General view of water heater EPMH.	4
<b>2.1. Construction of water heater - hydraulic part.</b>	<b>5</b>
Pic.2a. Hydraulic connection.	5
<b>2.2. Assembly of thermal cut-out AKW33.</b>	<b>6</b>
Pic.2b. Assembly of thermal cut-out AKW33.	6
<b>3. Construction of differential pressure switch EPMH</b>	<b>7</b>
Pic.3. Differential pressure switch EPMH.	7
<b>4. Construction of heating box</b>	<b>8</b>
Pic.4. Construction of heating box .	8
Tab.1. Parameters.	8
<b>5. Wiring diagram.</b>	<b>9</b>
Pic.5. Electric diagram.	9
<b>6. Power knob EPMH.</b>	<b>10</b>
Pic.6. Power knob EPMH.	10
<b>7. Electric diagram.</b>	<b>11</b>
Rys.7. Schemat instalacji elektrycznej.	11
<b>8. Spare parts list.</b>	<b>12</b>
Tab.2. Parts list.	12
<b>9. Technical specifications.</b>	<b>13</b>
Tab.3. Technical specifications	

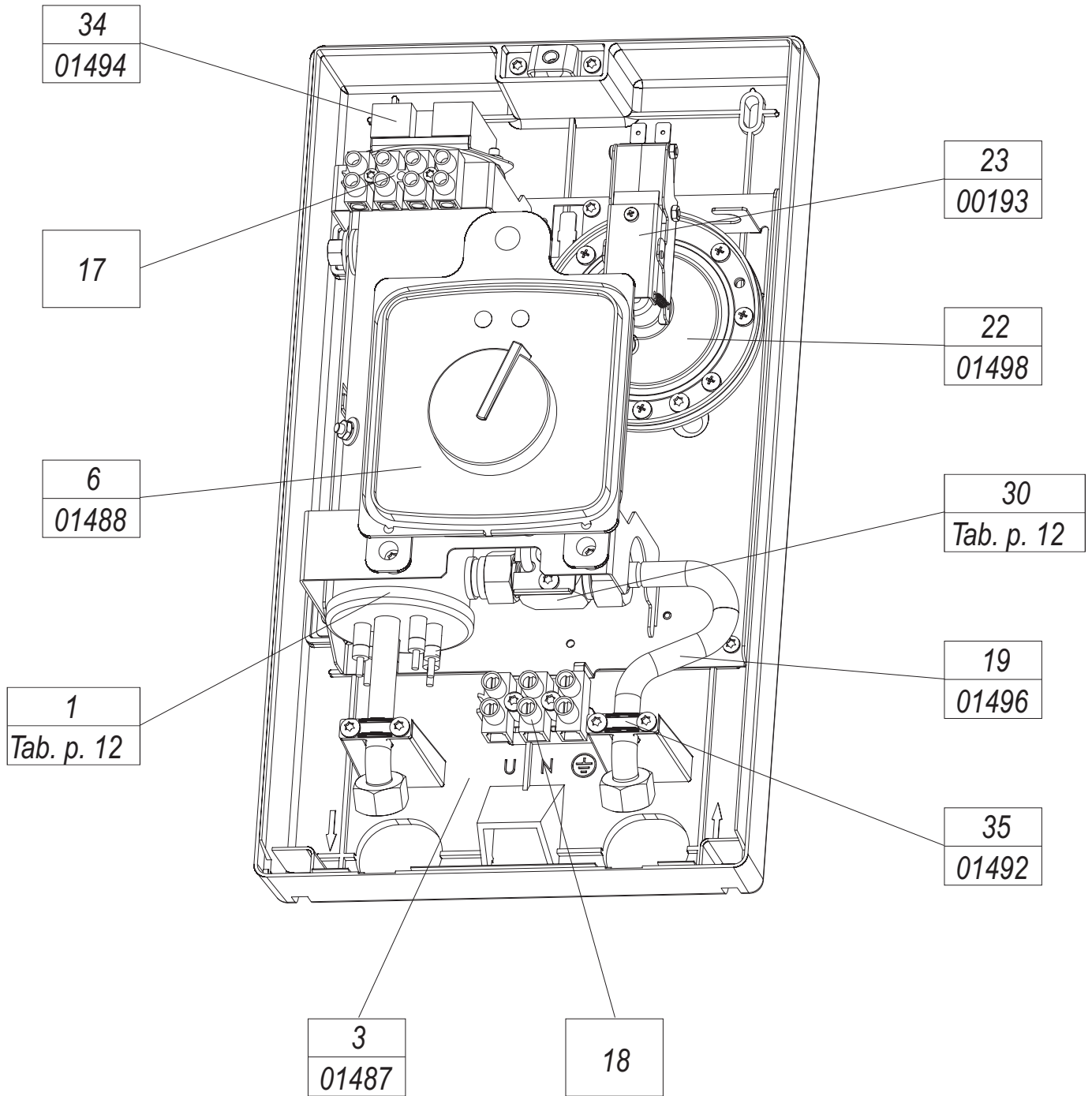
# 1. Water heater EPMH - exterior view.

Pic.1. Water heater EPMH - exterior view.



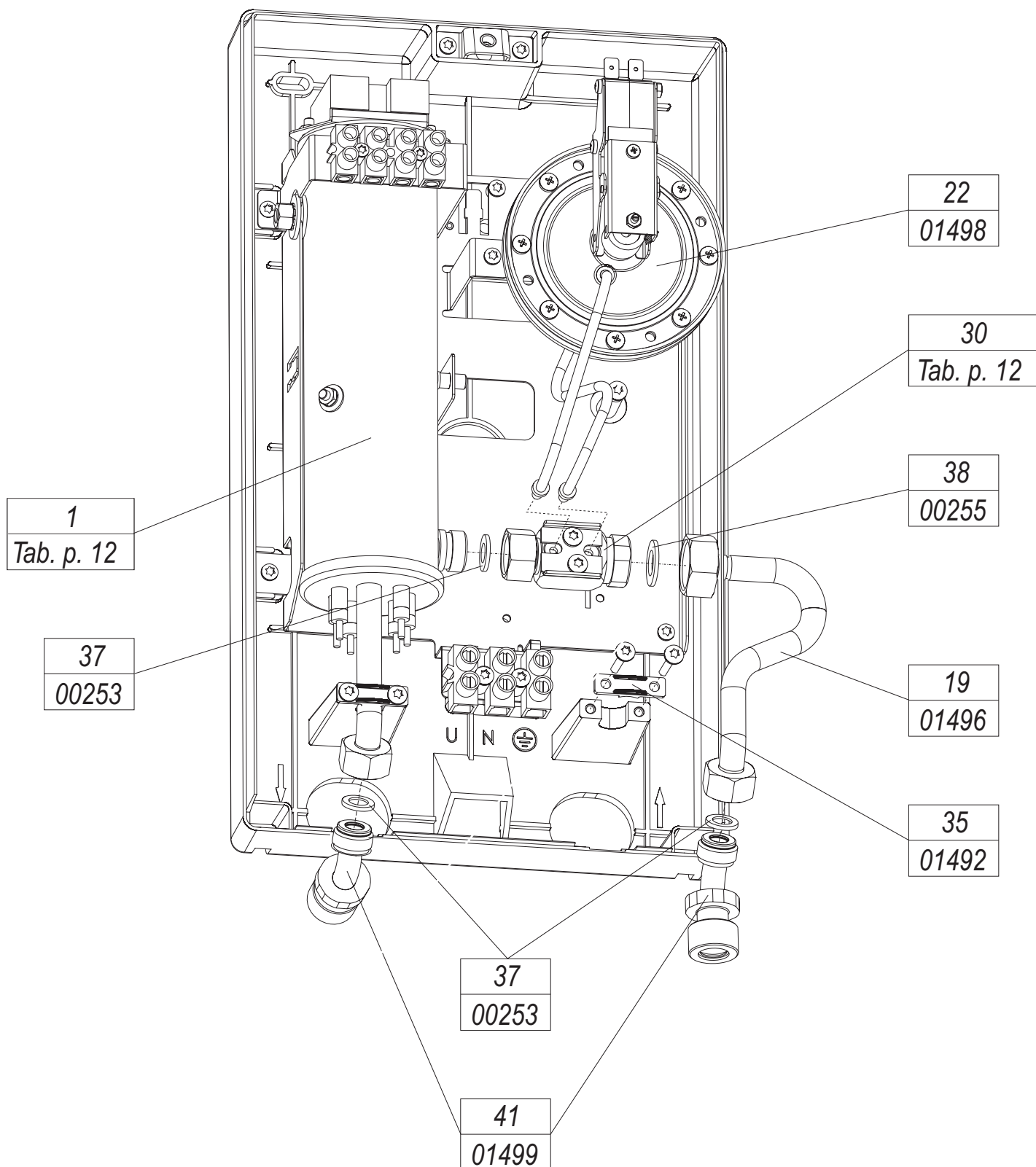
## 2. Construction of water heater EPMH.

Pic.2. General view of water heater EPMH.



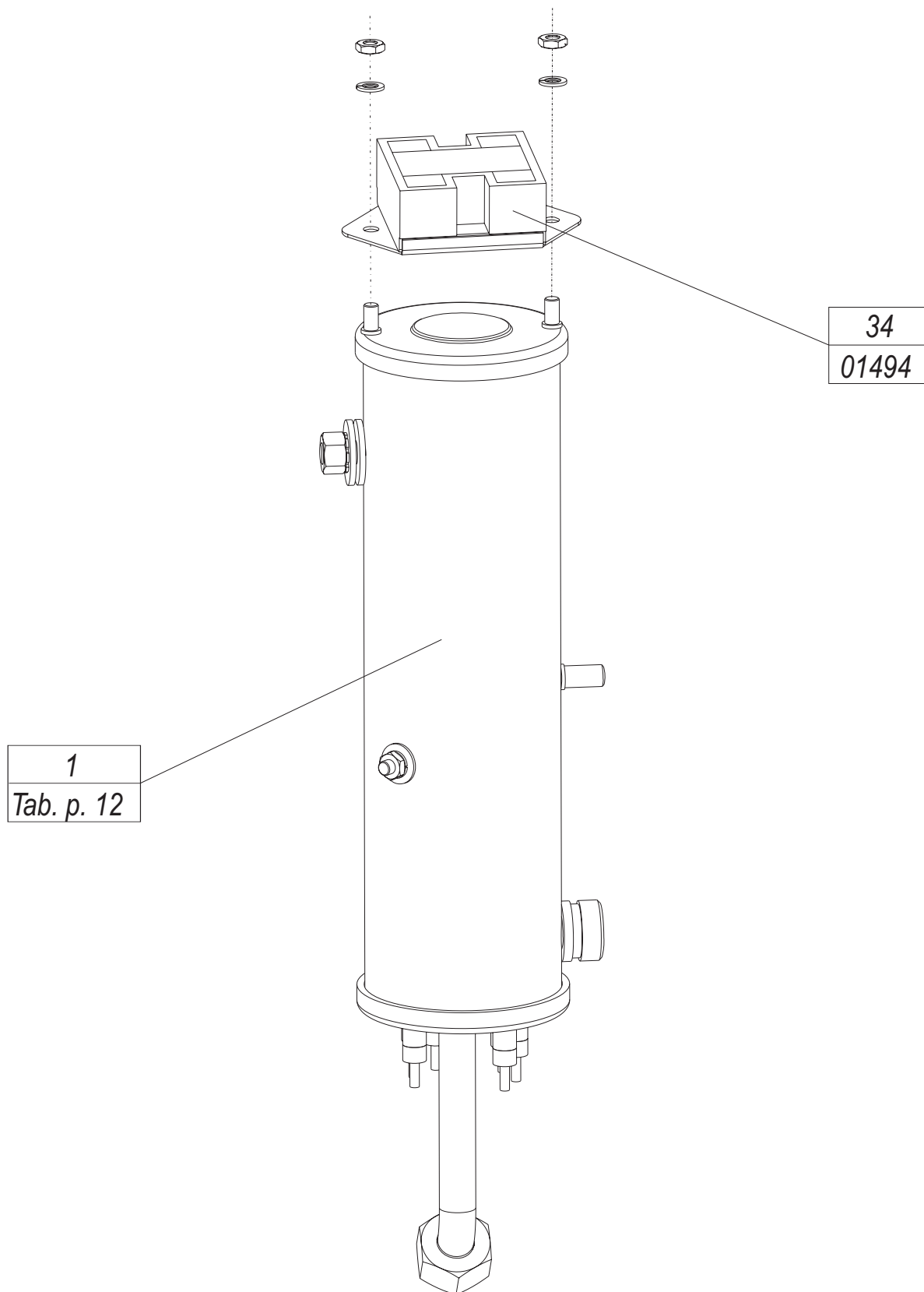
## 2.1. Construction of water heater - hydraulic part.

Pic.2a. Hydraulic connection.



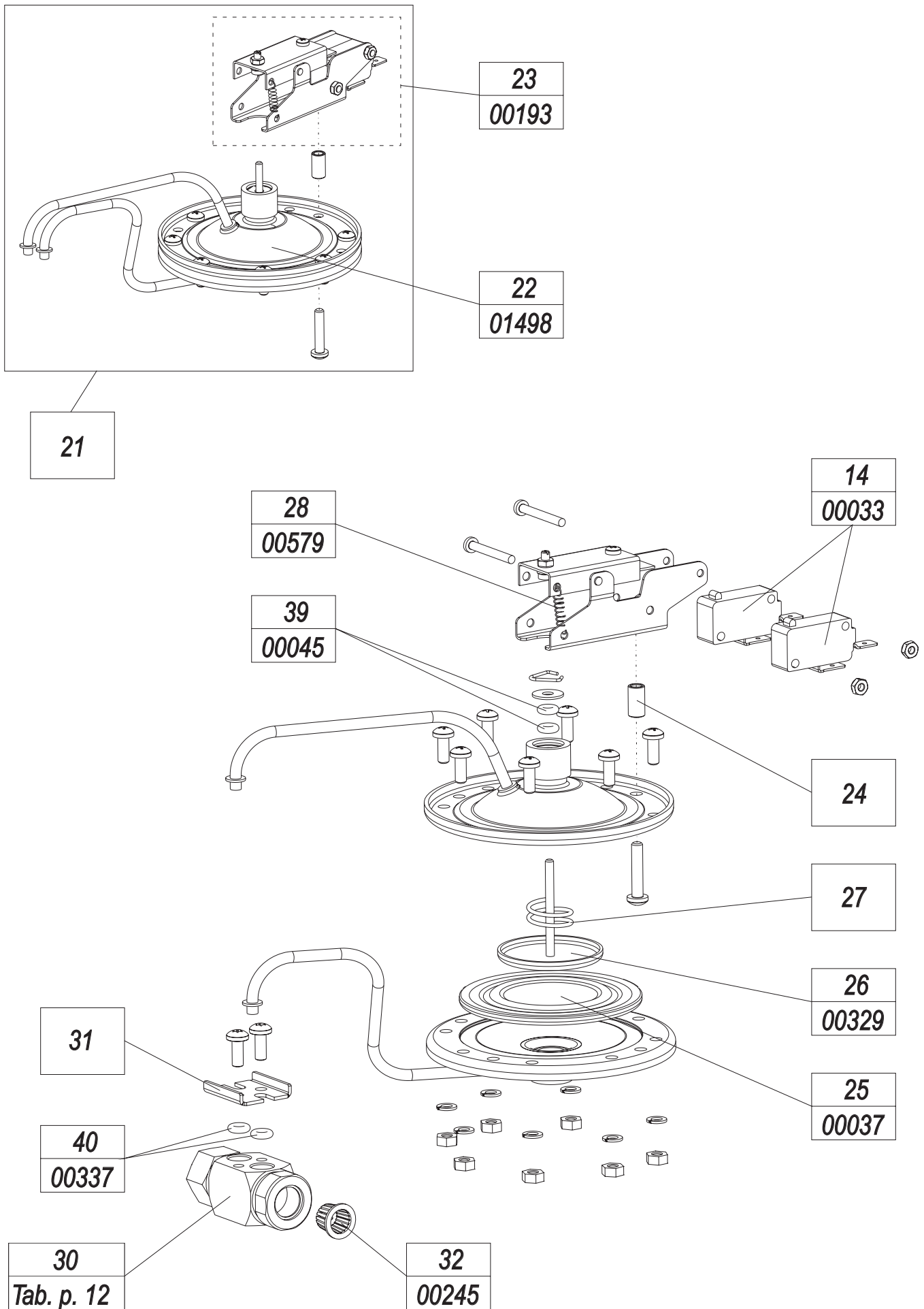
## 2.2. Assembly of thermal cut-out AKW33.

Pic.2b. Assembly of thermal cut-out AKW33.



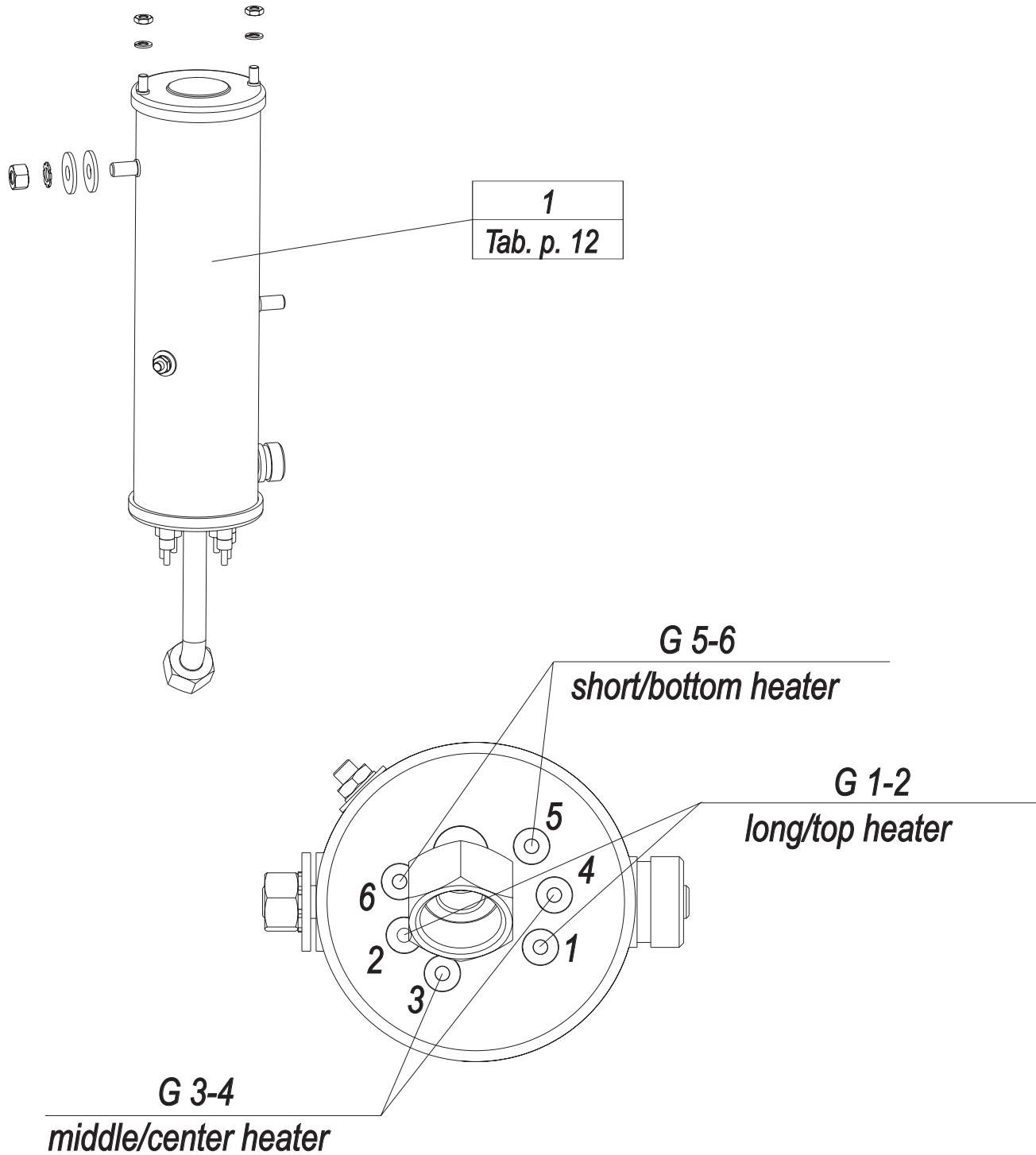
### 3. Construction of differential pressure switch EPMH.

Pic.3. Differential pressure switch EPMH.



## 4. Construction of heating box

Pic.4. Construction of heating box .



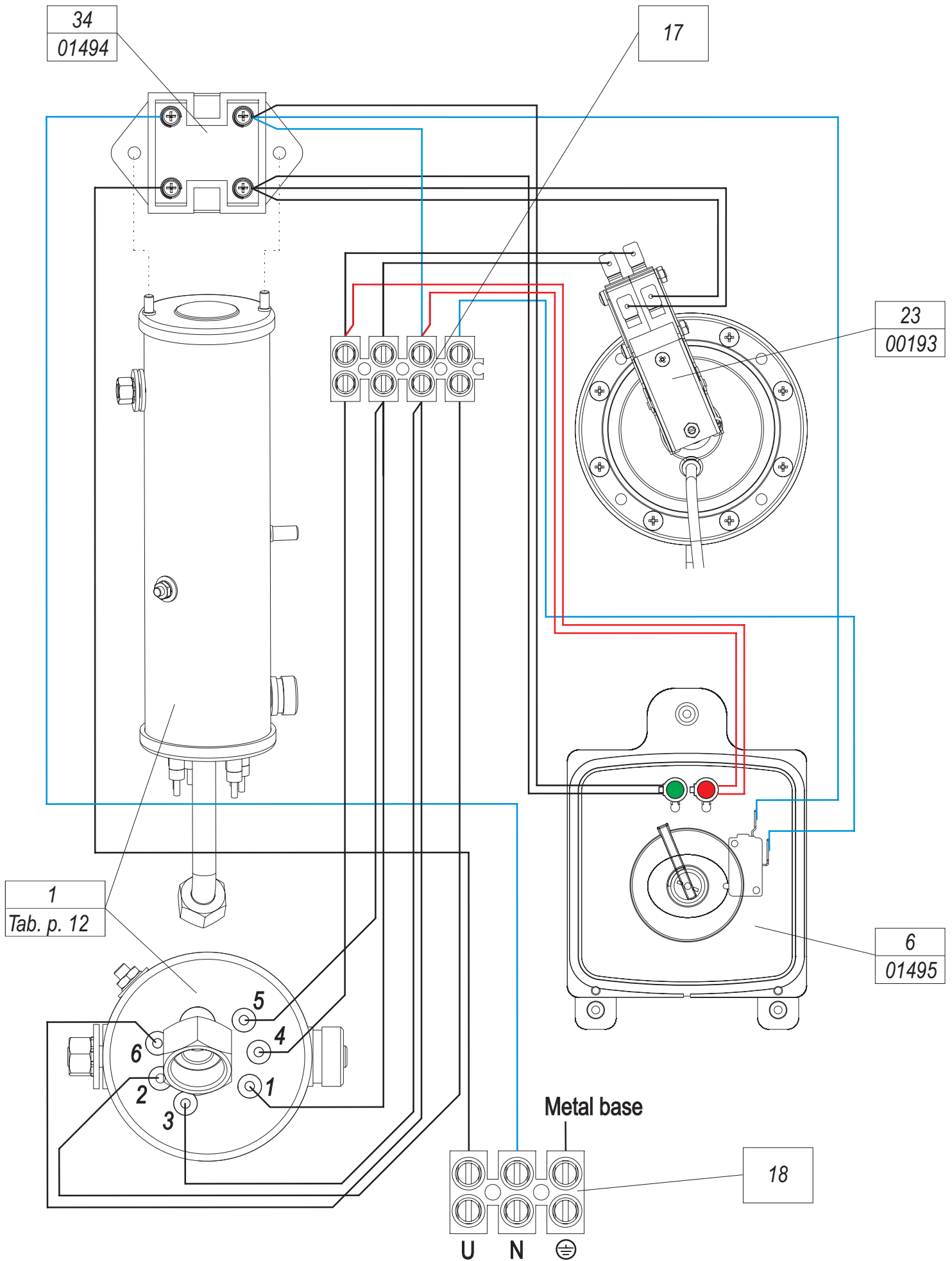
Tab.1. Parameters.

<b>Heating power</b>	<b>[kW]</b>	<b>7,5</b>			<b>8</b>			<b>8,5</b>		
		<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>	<b>G1</b>	<b>G2</b>	<b>G3</b>
Power of heating element	[W]	2500	2500	2500	3000	2500	2500	3000	3000	2500
Rated voltage	[V]	230	230	230	230	230	230	230	230	230
Rated current	[A]	11	11	11	13	11	11	13	13	11
Heating element resistance	[Ω]									



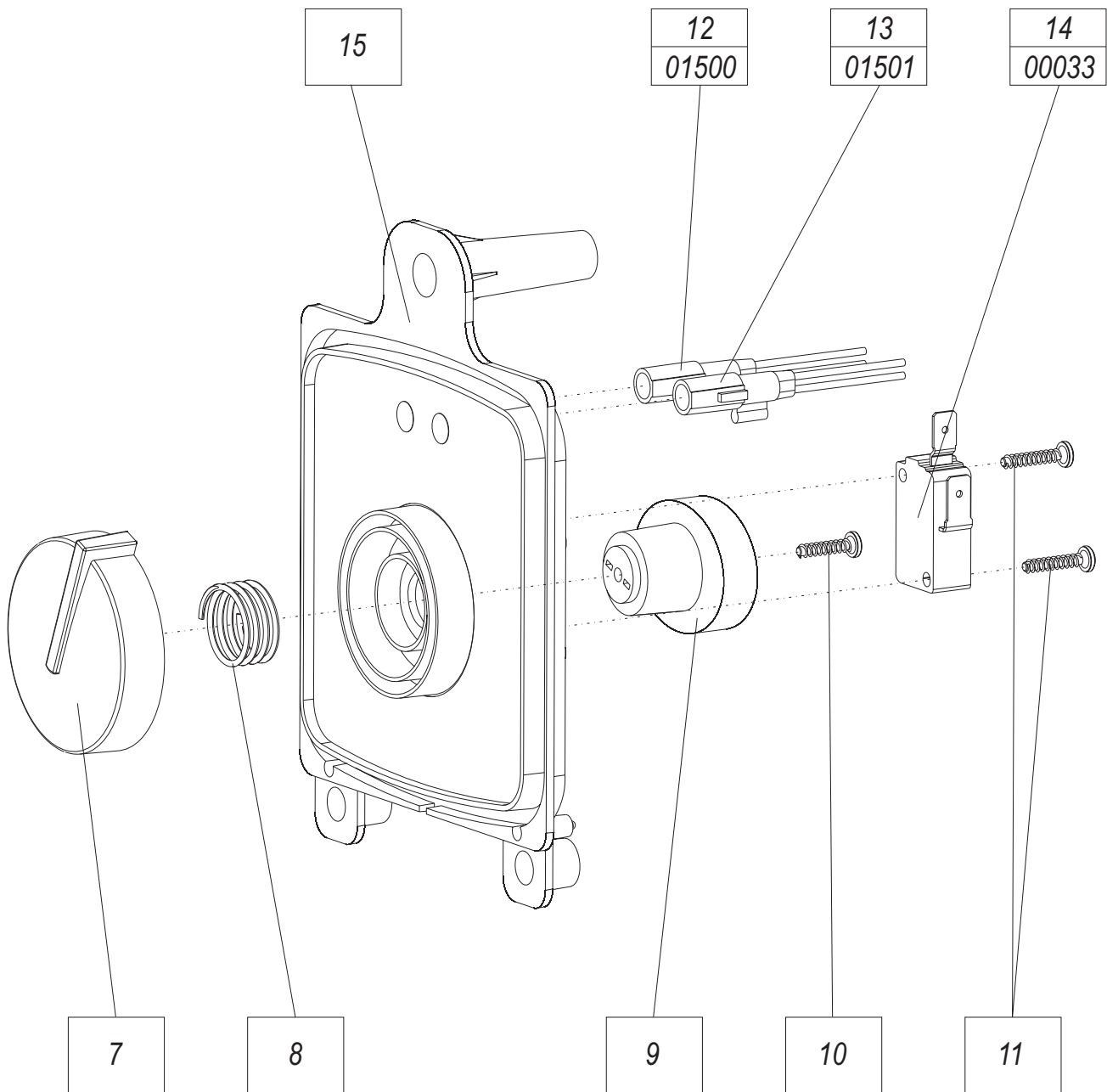
## 5. Wiring diagram.

Pic.5. Electric diagram.



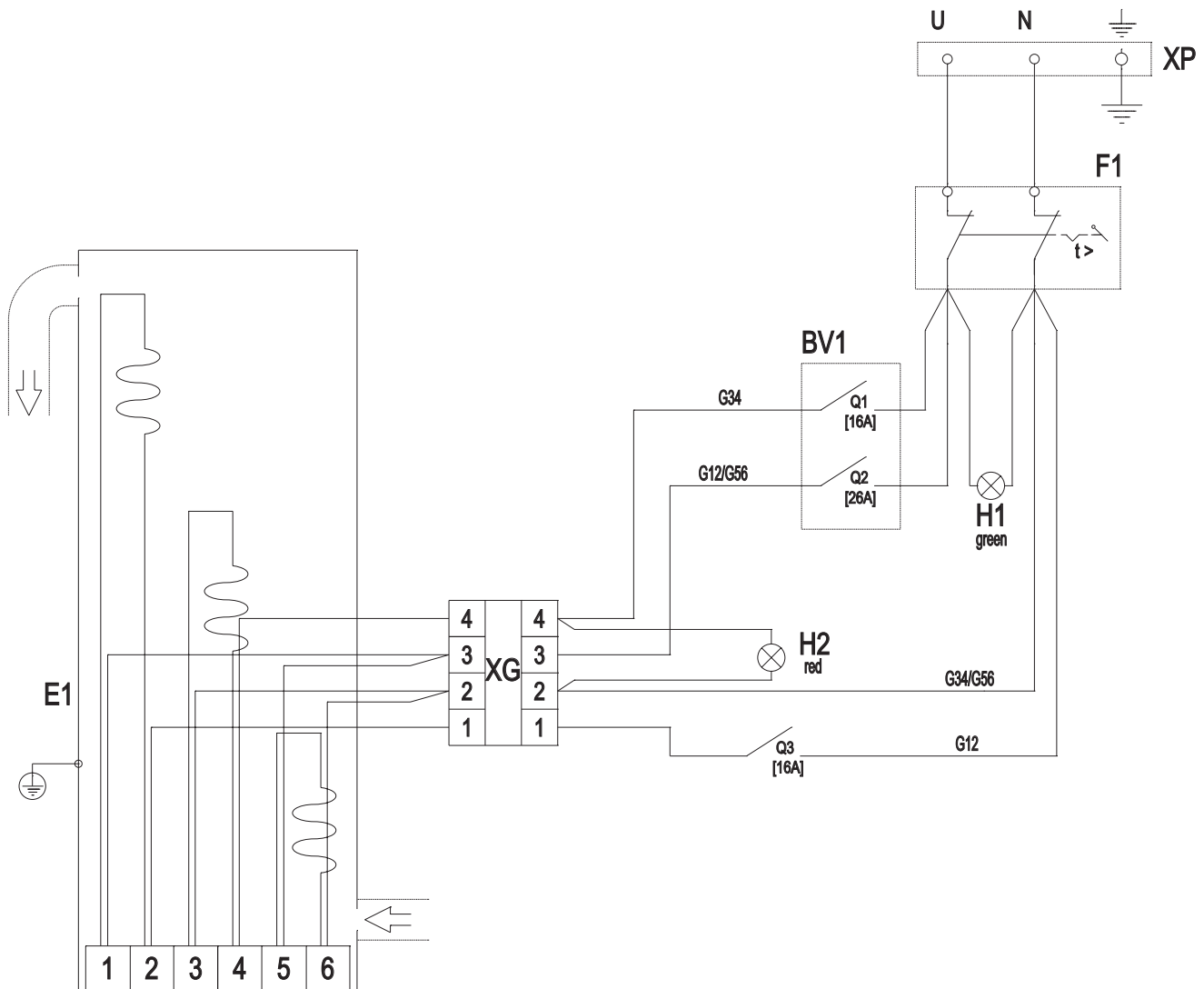
## 6. Power knob EPMH.

Pic.6. Power knob EPMH.

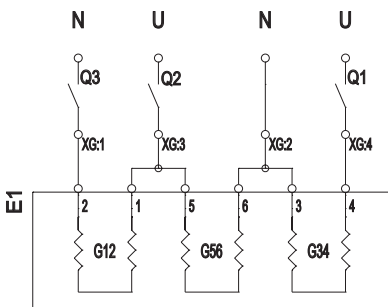


# 7. Electric diagram.

Pic.7. Electric diagram



- E1** - heating box
- XG** - terminal strips of heating box
- BV1** - differential pressure switch
- Q1, Q2** - microswitch of differential pressure switch
- Q3** - microswitch of power knob
- F1** - thermal cut-out
- XP** - terminal strips
- H1** - power supply "on" (green indicator)
- H2** - heating "on" (red indicator)



## 8. Spare parts list.

Tab.2. Parts list.

Pos.	Service code	Picture number	Name		Notice
1	01483	EPMH-03.00.00/4	Heating box EPMH 7,5kW/230V	1	E1
	01482	EPMH-03.00.00/5	Heating box EPMH 8,0kW/230V		
	01481	EPMH-03.00.00/6	Heating box EPMH 8,5kW/230V		
2					
3	01487	EPME-01.00.00	Bottom wall EPMH/EPME	1	
4	01488	EPME-02.00.00	Front cover EPMH/EPME	1	
5					
6	01495	EPMH-02.00.00	Power knob EPMH	1	
7		WP-104	Knob	1	
8		WM-062	Spring	1	
9		WP-105	Cam	1	
10		MARCOPOL	Screw TW 3,1x14 TX	1	
11		MARCOPOL	Screw TW 3,1x16 KB/1	2	
12	01500	WE-001/23	Green indicator EPMH	1	H1
13	01501	WE-001/24	Red indicator EPMH	1	H2
14	00033		Microswitch	3	Q1,Q2,Q3
15		WP-108	Panel's support PPH2	1	
16					
17		WE-019	Terminal strip	1	XG
18		EKL 3E	Terminal strip	1	XP
19	01496	EPMH-04.00.00	Inlet connection pipe EPMH	1	
20					
21		ZW-20.00.00	Differential pressure switch	1	
22	01498	ZN-14.00.00	Differential pressure without microswitch	1	
23	00193	ZL-04.00.00	Microswitch box	1	
24		Z-202	Sleeve	1	
25	00037	WP-012	Diaphragm	1	
26	00329	EPO.D-01.03.00	Retainer	1	
27		WM-047	Spring	1	
28	00579		Spring	1	
29					
30	00673	EPV-06.00.00a/01	Flange unit EPV02 9kW (type J)	1	ø 2,4
	01497	EPV-06.00.00a/07	Flange unit 8,5kW (EPMH)	1	ø 2,8
31		EPO.U-04.00.05	Clamp	1	
32	00245	WP-017	Filter 1/2"	1	
33					
34	01494	TOMIC	Thermal cut-out AKW33 95.05	1	F1
35	01492	WP-141	Clamp connection	2	
36					
37	00253	WP-054.02	Gasket 1.5x14,8x8 (3/8")	3	
38	00255	WP-054.07	Gasket 1.5x18,2x11,7 (1/2")	1	
39	00045		O-ring 3,0x2,4	2	differential pressure switch
40	00337		O-ring 3,3x2,4	2	flange unit
41	0199	EPME-08.00.00	Installation connectors EPME/EPMH	2	

## 9. Technical specifications.

---

Tab.3. Technical specifications

<b>Water heater EPMH</b>		<b>7,5</b>	<b>8</b>	<b>8,5</b>
Rated power	kW	7,5	8	8,5
Rated voltage		230V~		
Rated current	A	32,7	34,8	37,0
Activation point	l/min	2,3	2,5	2,7
Efficiency (at $\Delta 40^{\circ}\text{C}$ )	l/min	2,7	2,9	3,1
Min. connecting wires section	mm <sup>2</sup>	3 x 6		
Max. connecting wires section	mm <sup>2</sup>	3 x 16		
Pressure in the water mainsj	MPa	0,1 ÷ 0,6		
Overall dimension (height x width x depth)	mm	350 x 200 x 110		
Weight	kg	~3,3		
Water fittings		G 1/2"		