



SERVICE MANUAL

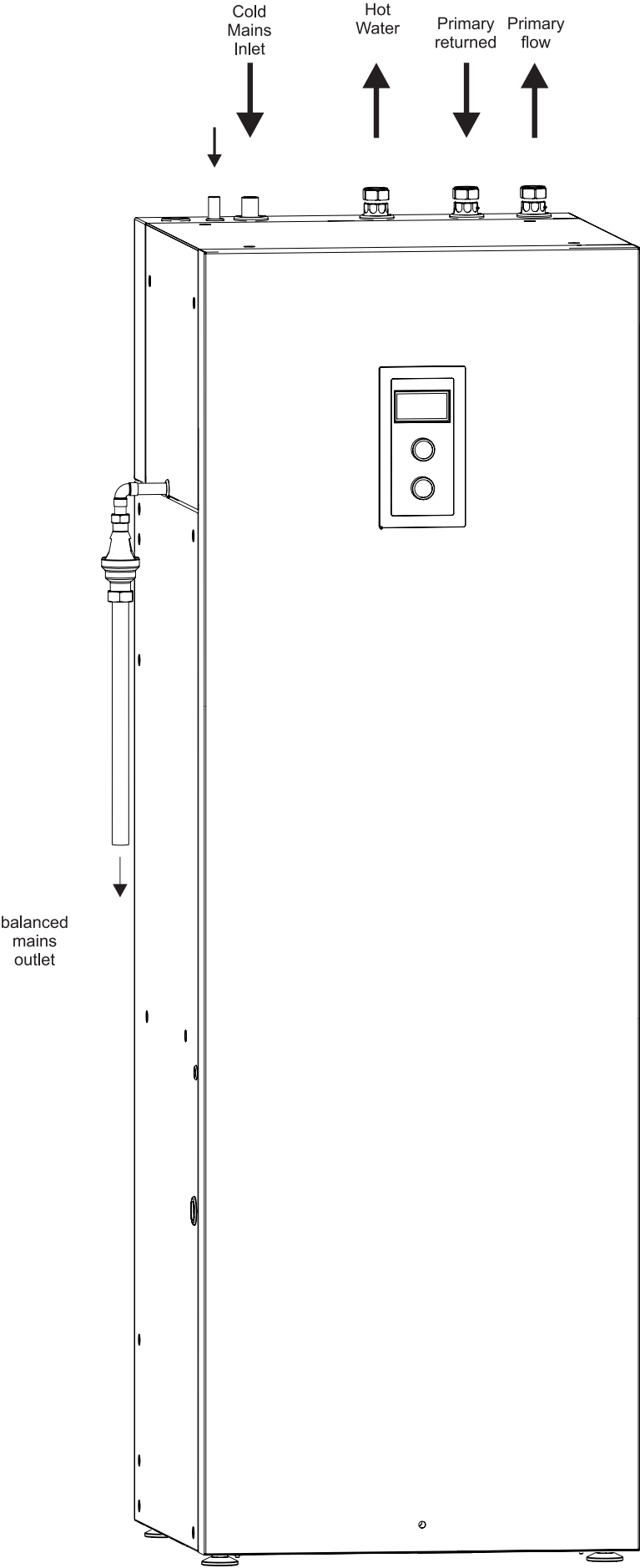
Comet Combination Unit V1

04.06.2018

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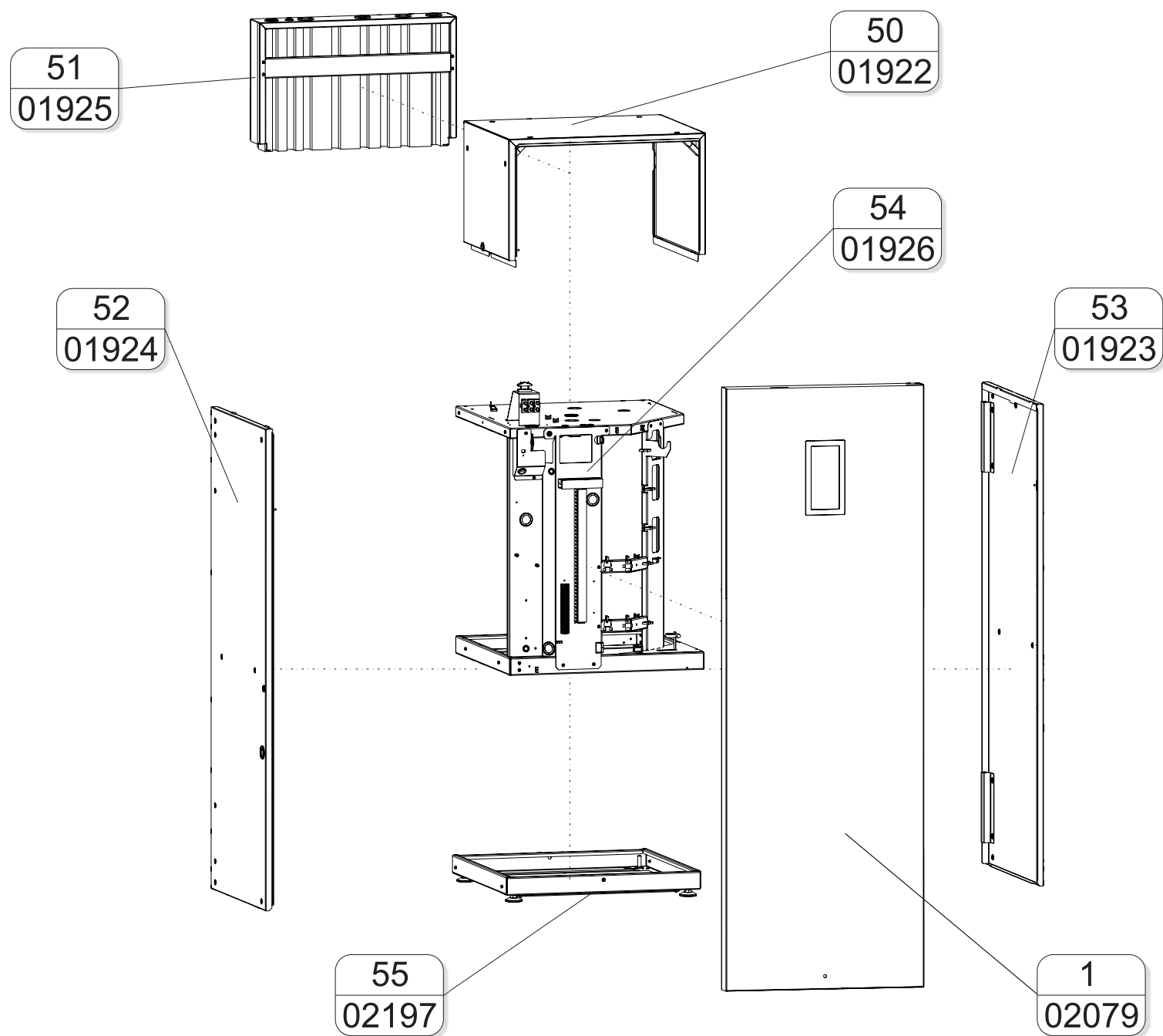
1. Exterior view

Pic.1. Comet Combi V1 boiler exterior view.



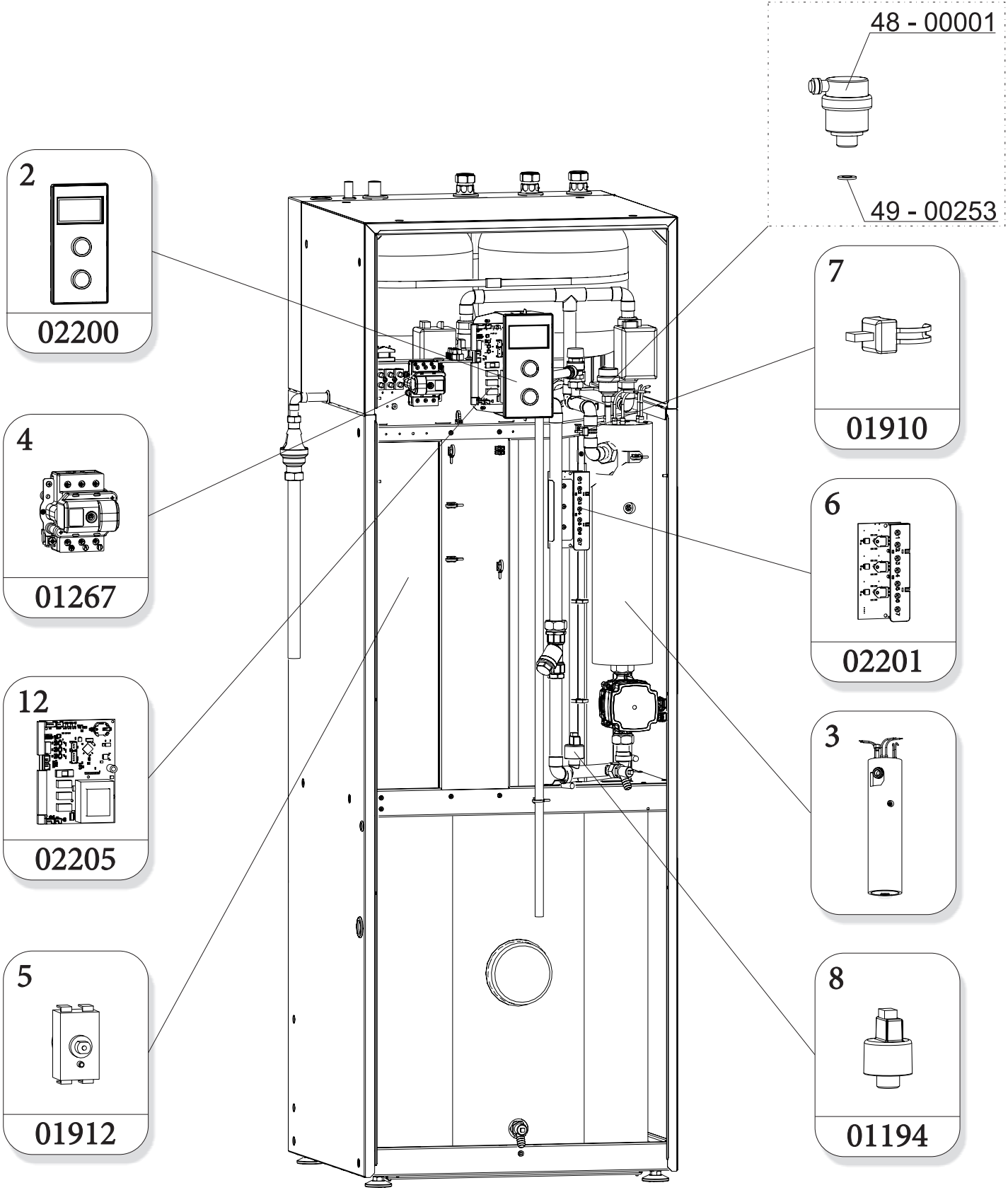
1.1 Main view - cover.

Pic.2. Boiler's cover Comet Combi V1



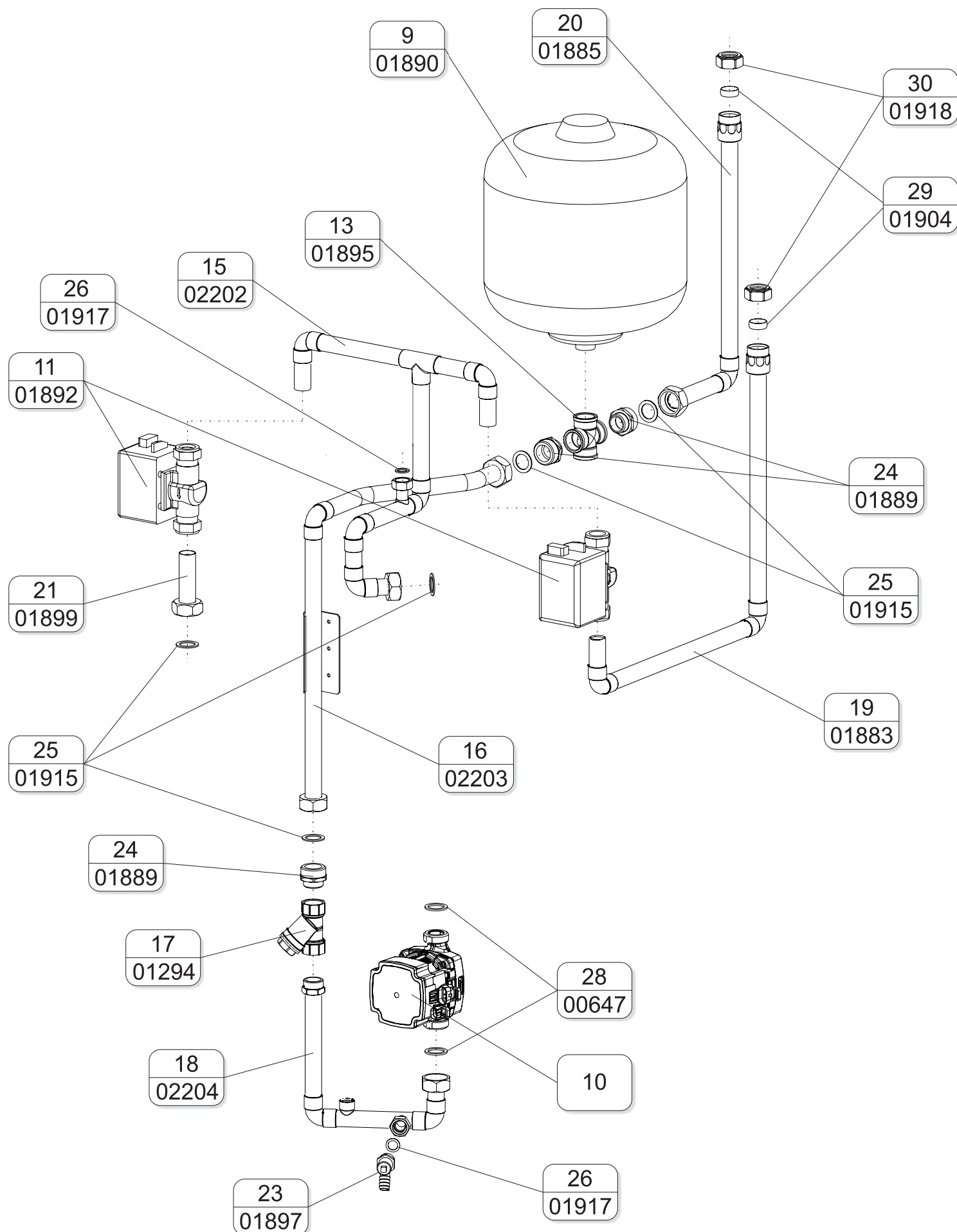
2. Interior view

Pic.3. Comet Combi V1 interior view



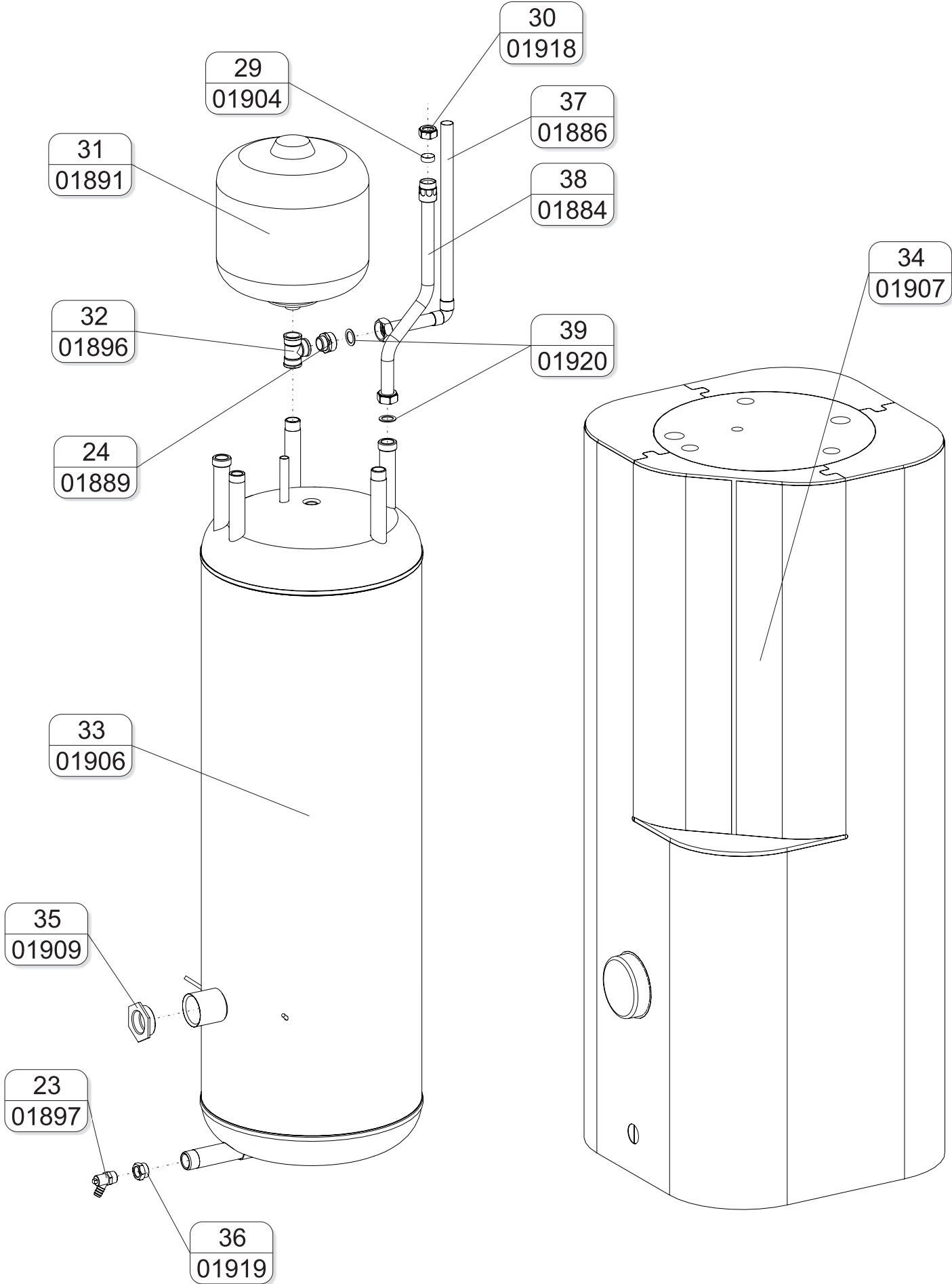
2. 1 Interior view - c.h. heating part

Pic.4. C.h. heating part



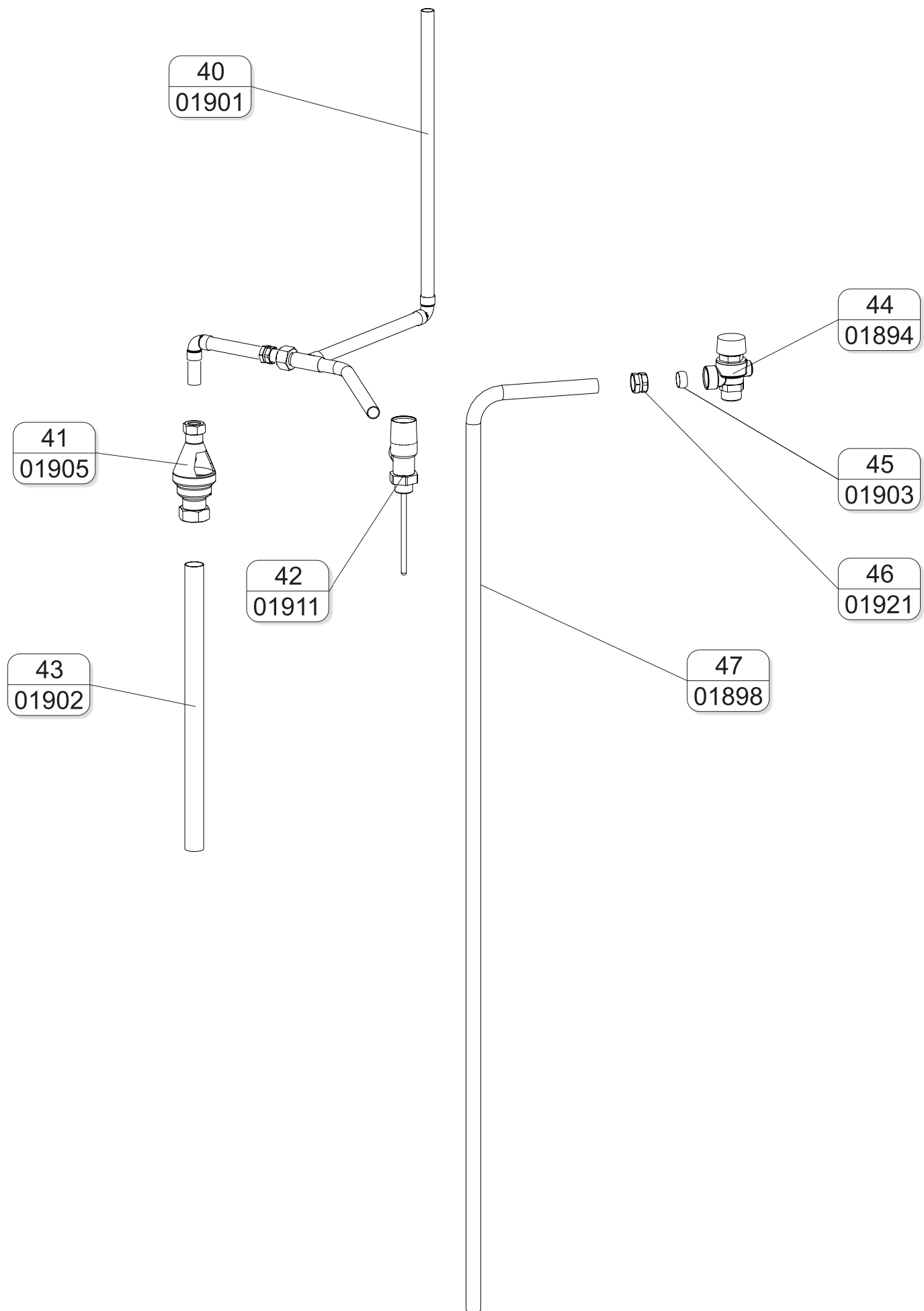
2. 2 Interior view - D.H.W. water part

Pic.5. D.H.W. water part



2.3 Interior view - safety group

Pic.6. Safety group



3. Heating box Comet Combi V1

Pic 7. Heating box

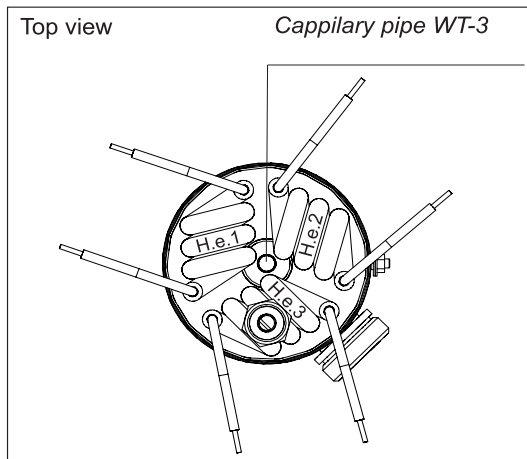
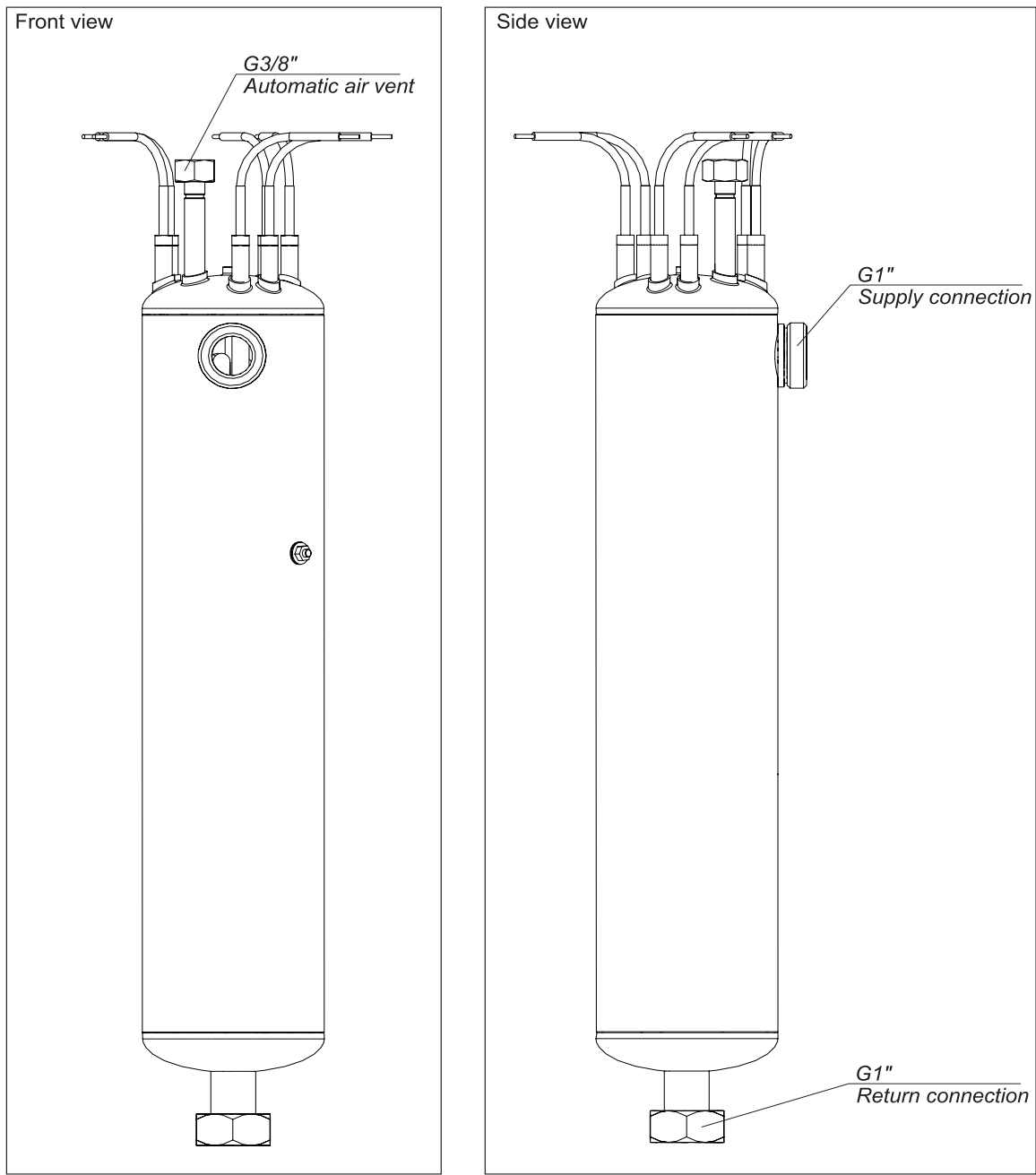


Table 1. Heating box parameters

Boiler type	Service code	Elements	Heating el. resistance [Ohm]
9kW/240V~	01879	3	18,4÷19,6
12kW/240V~	01880	3	13,6÷14,7
14,4kW/240V~	01881	3	11,3÷12,3

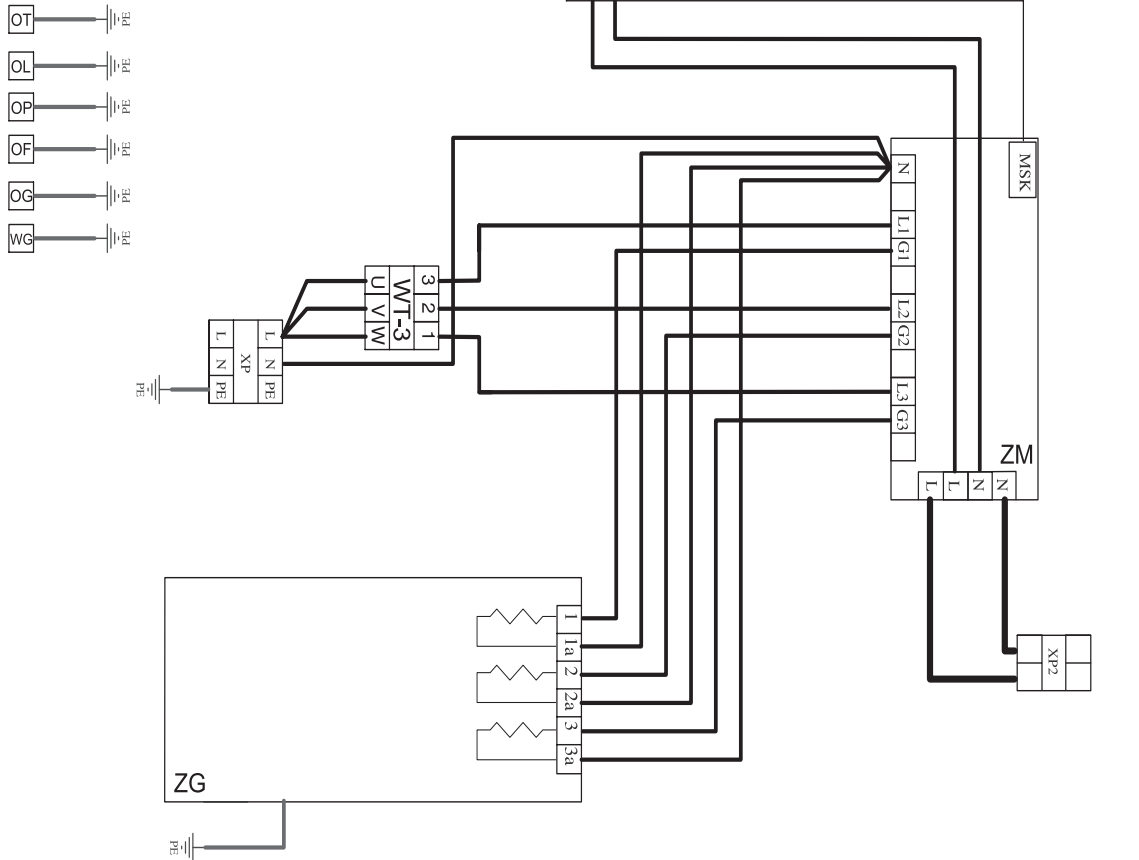
Service manual Comet Combi V1

5. Wiring diagram Comet Combi V1

Pic 9. Electric diagram Comet Combi V1

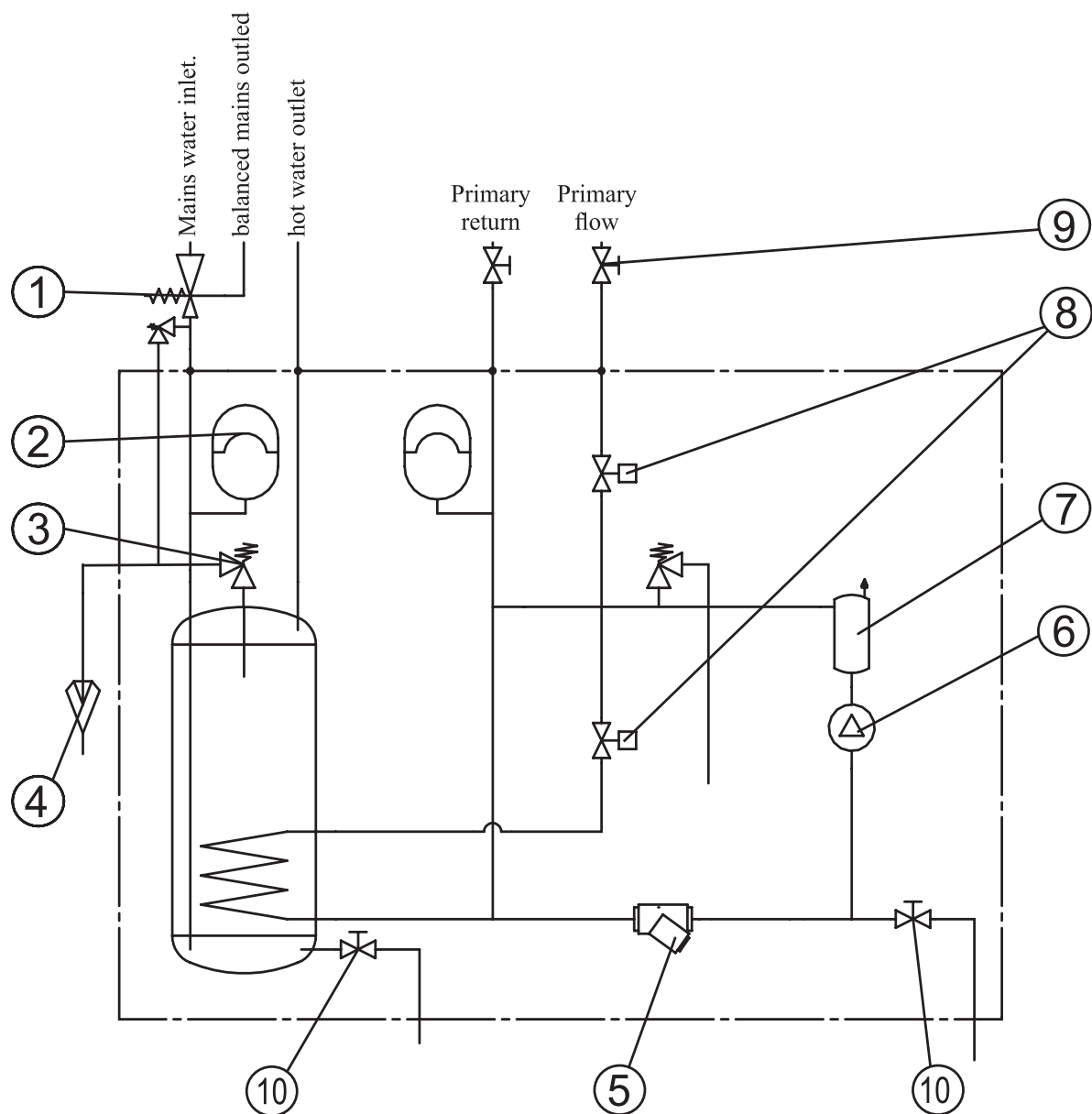
ZG - heating box
C.PW - control panel
MSK - control board MSK.80
F2 - safety cut out
WT-3 - thermal cut out WT-3
P1 - pump
Z1 - electric valve C.H.
Z2 - eletric valve D.H.W.

ZM - power board
Pres - pressure sensor
Tout - supply temperature sensor
Tin - return temperature sensor
Tzas - DHW temperature sensor
XP1, XP2 - terminal strip



6. Hydraulic diagram Comet Combi V1

Pic 10. Hydraulic instalation



- 1 - Combination Valve with PRV
- 2 - Expansion vessel
- 3 - T&P Relief valve
- 4 - Tundish
- 5 - Magnetic filter

- 6 - pump
- 7 - Heat Exchanger including AAV
- 8 - electric valves
- 9 - Isolating valves
- 10 - Drain valves

7. Parts list.

Table 3. Parts list

Pos.	Service code	Picture number	Name	Quantity (pcs)	Notice
1	02079	EKD.M3-02.05.00	Cover EKD07	1	
2	02200	C.PW.01-00.00.00/02	Control panel C.PW 01 EKD07(V01) EHC	1	
3	01878	EKD07-03.00.00/06	Heating box EKD07 EHC 6 kW/240V~	1	
	01879	EKD07-03.00.00/07	Heating box EKD07 EHC 9 kW/240V~	1	
	01880	EKD07-03.00.00/08	Heating box EKD07 EHC 12 kW/240V~	1	
	01881	EKD07-03.00.00/09	Heating box EKD07 EHC 14,4 kW/240V~	1	
4	01394	WT3a-00.00.00/06	WT3 EKD	1	
5	01912	01.032.0021.0	Thermal cut-out EKD07	1	
6	02201		Power board EKD07(V1) (without pipe connection)	1	
7	01910	01.118.0029.0	Temperature sensor EKD07	1	
8	01194		Pressure sensor EKCO.L2	1	
9	01890	UR 012 231	C.H expansion vessel EKD	1	
10	02086		Pump WILO Para 15-130/7-50/iPWM1-3(without cable)	1	
	02172		Pump WILO Para 15-130/7-50/iPWM1-		
11	01892	V4043H1056	Electric valve EKD07 EHC	2	
12	02205	PCP-MSK.80/02	Control board MSK.80 EKD07 (V1) EHC		
13	01895	01.310.0069.0	Pipe cross G3/4	1	
14					
15	02202	EKD07-04.02.00	Distributor pipe EKD07(V1) EHC	1	
16	02203	EKD07-04.01.00	Power board connection EKD07(V1) EHC	1	
17	01294	F1F-00.00.00/00/0-1	Magnetic filter 3/4"	1	
18	02204	EKD07-04.06.00	Pump connection EKD07(V1) EHC	1	
19	01883	EKD07-04.03.00	Flow c.h. connection EKD07 EHC	1	
20	01885	EKD07-04.05.00/01	Return c.h. connection EKD07 EHC	1	
21	01899	WM-279/02	Coil connection EKD07 EHC	1	
22					
23	01897	01.315.0023.0	Drain valve with 1/2" hose connection EKD07 EHC	1	
24	01889	Z-245	Reduction connection G1-G3/4	1	
25	01915	WP-054/15	Gasket 1,5x21x30		
26	01917	WP-054/10	Gasket 1,5x13x18,6		
27	01916	WP-054/12	Gasket 1,5x16x24		
28	00647		Gasket 2x30x21(1")	2	
29	01904	01.314.0001.0	Clamping ring connex 22		
30	01918	Z-235	Nut Z-235		
31	01891	R1012 228	D.H.W. expansion vessel EKD	1	
32	01896	01.310.0063.0	Tee pipe G3/4	1	
33	01906	EKD07-01.00.00	Cylinder EKD07	1	
34	01907	EKD07-00.01.00	Cylinder isolation EKD07	1	
35	01909	Z-335	Plug 7/4" EKD07	1	
36	01919	Z-185	Reduction connection G3/4 - G1/2	1	
37	01886	EKD07-04.05.00/02	Cold water D.H.W. connection EKD07 EHC	1	
38	01884	EKD07-04.04.00/01	Hot water D.H.W. connection EKD07 EHC	1	
39	01920	WP-209	Gasket 1,5x21x30		
40	01901	EKD07-04.14.00	Safety connection EKD07 EHC	1	
41	01905	01.300.0027.0	Tundish 15/22	1	
42	01911	01.303.0023.0	Temperature-pressure valve 7bar/90	1	
43	01902	WM-277/02	Outlet safety connection EKD07 EHC	1	
44	01894		Safety valve 1/2" 3bar EKD07 EHC	1	
45	01903	01.314.0002.0	Clamping ring connex 15		
46	01921	Z-046b	Nipple G1/2"		
47	01898	EKD07-04.13.01	Overflow pipe EKD07 EHC	1	
48	00001	01.305.0004.0	Automatic air-vent valve EPCOM,EKCO.L	1	
49	00253	WP-54/02	Gasket 1,5x8x14,8		

Pos.	Service code	Picture number	Name	Quantity (pcs)	Notice
50	01922	EKD07-02.04.00	Upper cover EKD07	1	
51	01925	EKD07-02.03.00	Back cover EKD07	1	
52	01924	EKD07-02.06.00/02	Left cover EKD07	1	
53	01923	EKD07-02.06.00/01	Right cover EKD07	1	
54	01926	EKD07-02.02.00	Upper frame EKD07	1	
55	01927	EKD.M3-02.01.00	Base EKD.M3	1	

8. Technical parameters

Table 4. Technical parameters.

Electric boiler Comet Combi V1					
Electrical Supply		240V~50Hz			
Rated power	kW		9	12	14,4
Rated current	A		39	52	63
Minimum Permitted Cable Diameter			10 mm	16mm	
Primary system pressure relief valve setting	bar	3			
Primary system operating pressure (min)		1			
Thermal cut-out	°C	90 - 99			
Expansion vessel		Capacity 12L - Pre-charged 1,50 bar			
Outlet flow temperature	°C	30 ÷ 85			
Primary circulating pump		Grundfos or Wilo-Para 15/7 iPWM			
Safety valve	bar	Opening pressure: 3 bar			
Hydraulic connections		Connections: 22 mm			
CYLINDER DETAILS					
Maximum water supply pressure	bar	10			
Cylinder operating pressure (Secondary)	bar	3			
Cylinder operating pressure (Primary Max)	bar	2,5			
Cylinder operating pressure (Secondary Max)	bar	5,5			
Thermostat	°C	30 ÷ 70 °C			
Tank capacity	l	140			
Temperature-pressure valve		95 °C / 6bar TP152 - 1/2			
Expansion vessel		3 bar (charge pressure)			
Hydraulic connections		Copper pipe ø 22 x 1			
Optional Immersion Heater		3000W 240 V			
Optional Immersion Heater	kg	Net	106,8		
		Gross	246		
Dimensions	mm	1745 x 580 x 630			



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