Service part catalogue

iVario® as of 03/2020 Pro XL (311) - 59 dm², 150 L

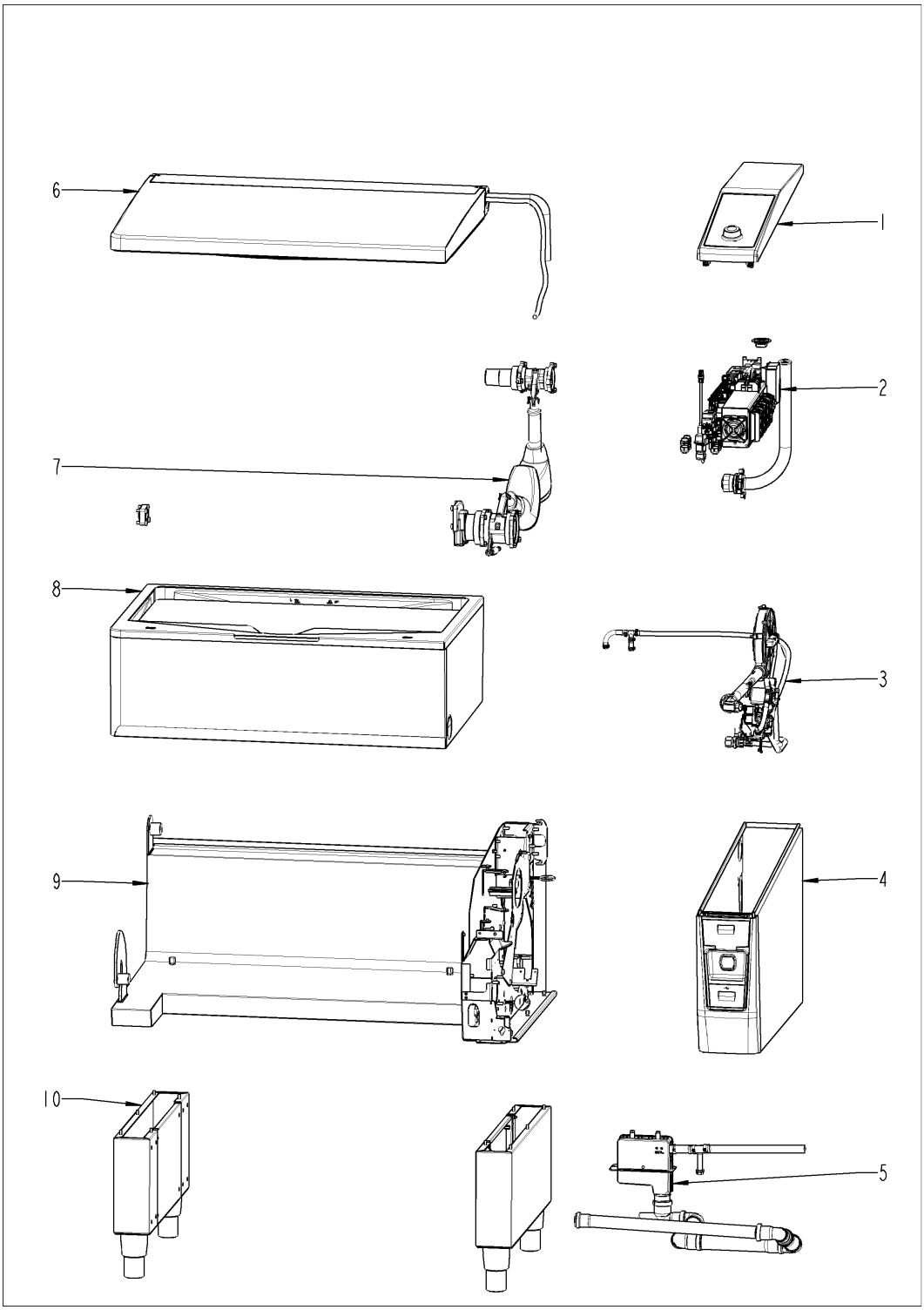
E31PK2209XXXXXXX



10/1/2024
3NAC400 V 50/60Hz

© Copyright by RATIONAL Technical Service
All Rights reserved

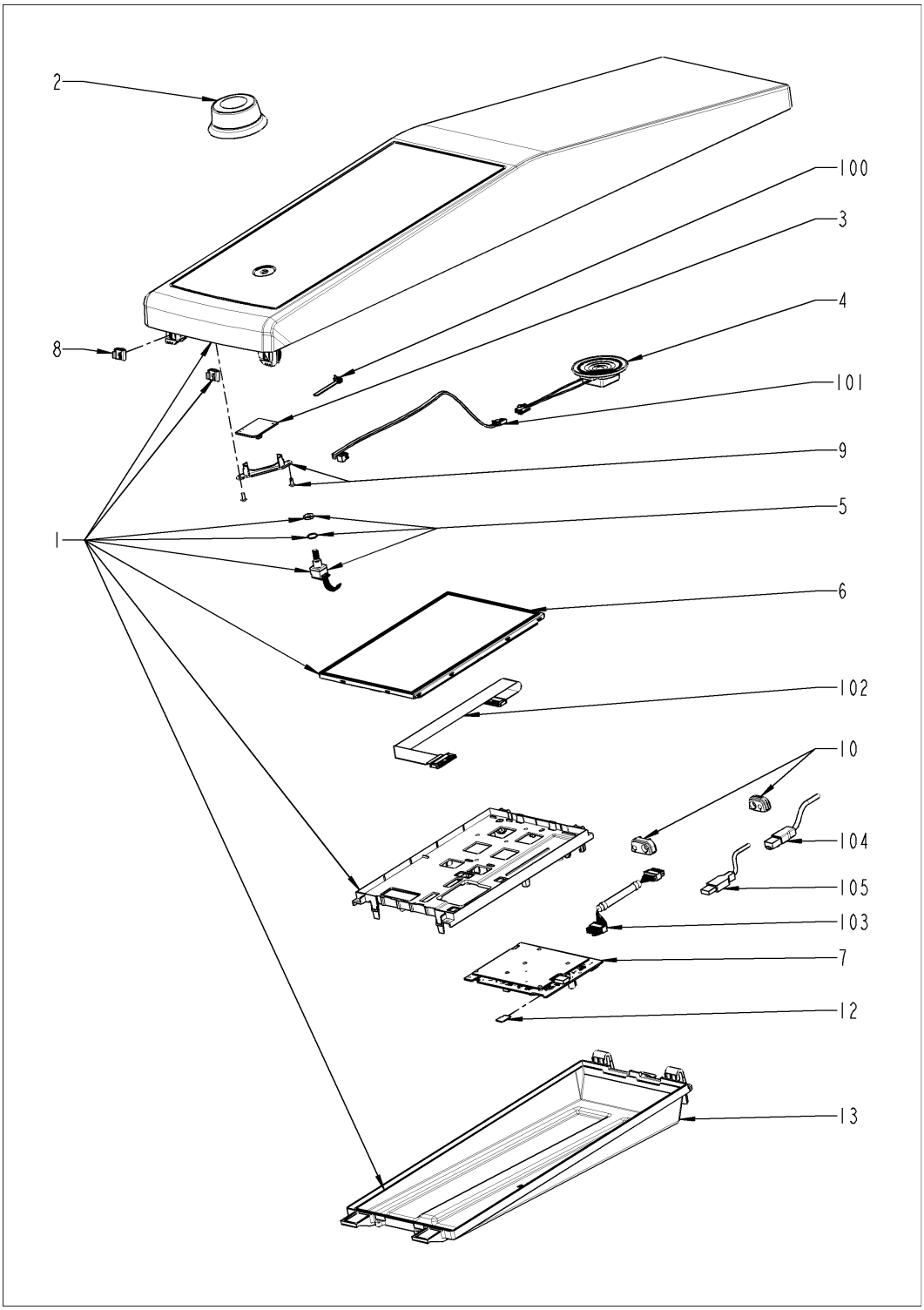
Overview



Overview

Pos. 1 Control panel **4**
Pos. 2 Electrical installation **6**
Pos. 3 Water distribution **9**
Pos. 4 Console **11**
Pos. 5 Water drain **13**
Pos. 6 Lid **15**
Pos. 7 Kinematic **17**
Pos. 8 Pan **19**
Pos. 9 Base structure **22**
Pos. 10 Underframe **24**
Pos. 20 Accessories **26**
Pos. 30 Repair and retrofit kit **49**

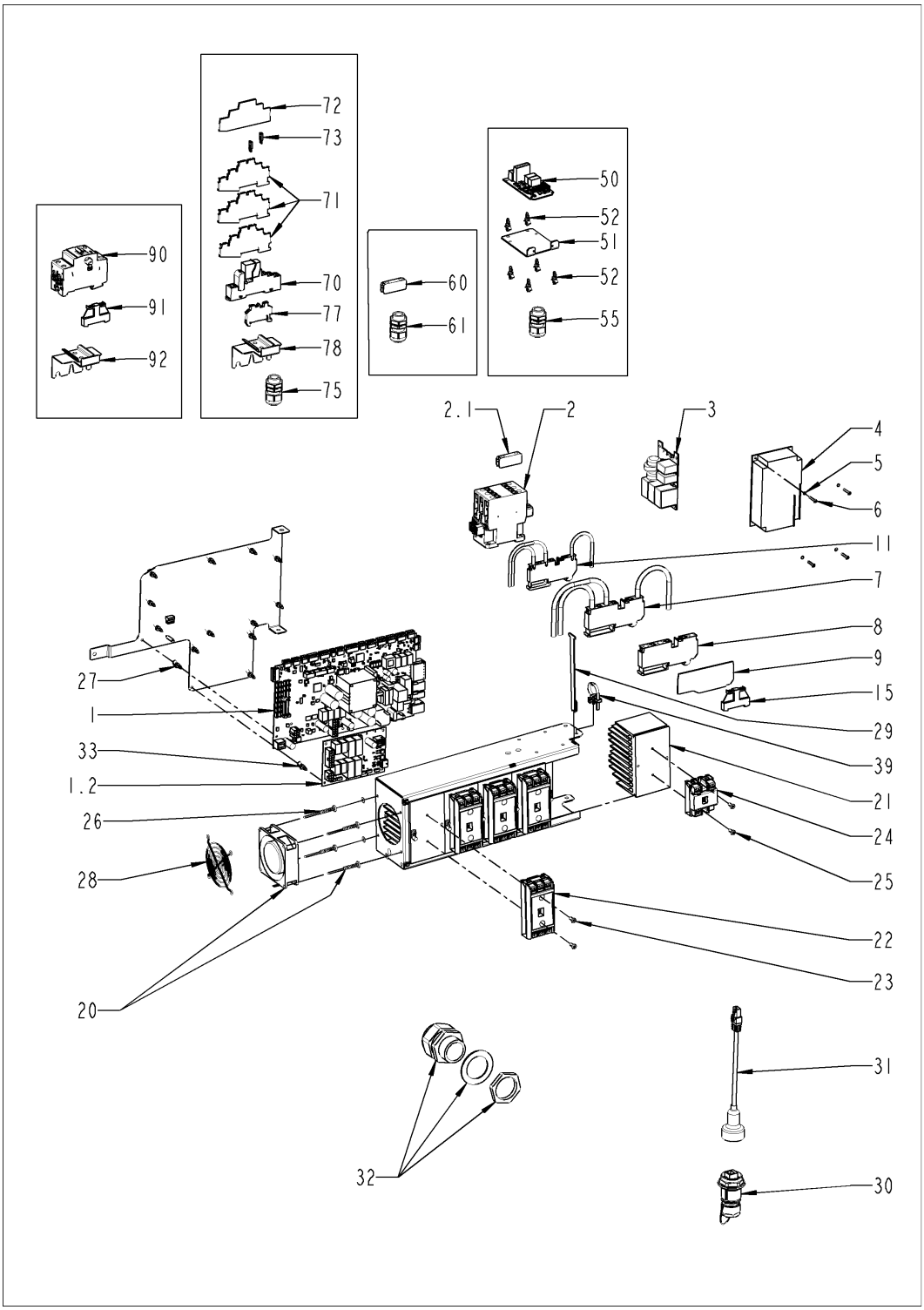
Pos. 1 Control panel



Pos. 1 Control panel

Pos.	Part no.	Description	Qty.
1	16.03.565P	Control panel RATIONAL	1
2	16.03.756P	Dial f. pulse generator	1
3	42.00.346P	Sensor on / off	1
4	40.07.746P	Loudspeaker SL 64 FR 8W	1
5	40.07.493P	Pulse generator	1
6	42.00.287P	Display *TFT*	1
7	42.00.251P	Control pcb (w/o SD-Card)	1
8	10.01.862P	Cage nut M5 for 1.7 up to 2.5mm	2
9	16.04.204S	On-Off sensor support	1
10	87.01.774S	Gasket kit for control panel cable	1
12	42.00.359P	Micro SD card	1
13	16.04.064P	Inner protective cover of the control panel	1
100	40.06.760P	Cable control pcb - capacitive switch	1
101	40.06.076P	Loudspeaker cable	1
102	40.06.569P	Cable CPU - TFT	1
103	40.06.103P	Bus cable 0,7m	1
105	40.06.583P	Interface cable USB 1,4m	1

Pos. 2 Electrical installation

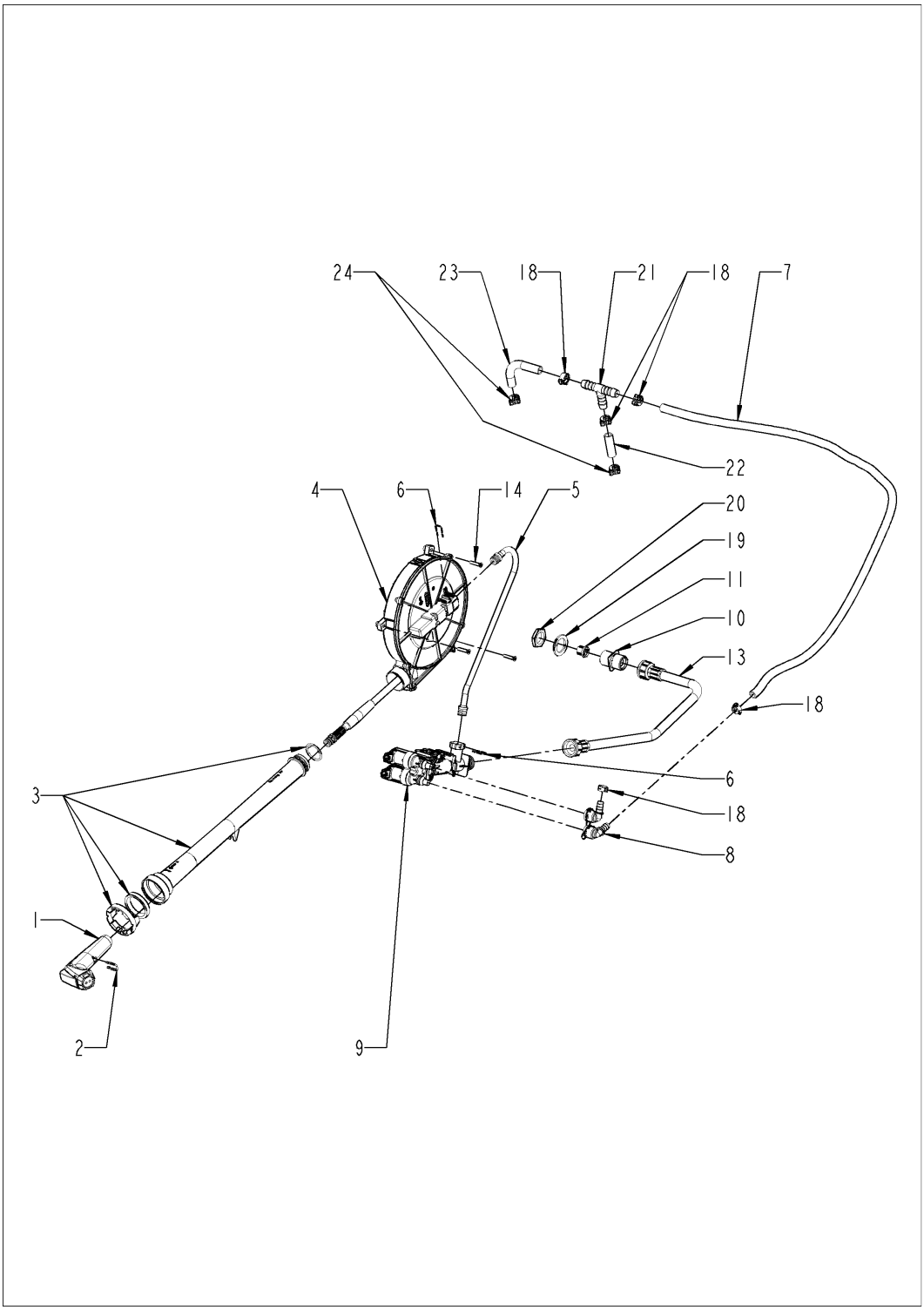


Pos. 2 Electrical installation

Pos.	Part no.	Description	Qty.
1	42.00.311P	Relay-I/O pcb A10	1
1.1	40.06.252P	Termination resistor	1
1.2	42.00.413P	I/O movement PCB A13	1
1.3	40.07.636P	Bus cable for A13 I/O board	1
1.4	40.07.635P	Adapter harness for I/O board A13	1
2	40.06.455P	Contactor K3-40B00 190R T AZ	1
2.1	40.02.641P	Auxilliary contact B&J HN10 N/O	1
3	42.00.322P	Electronic noice filter	1
4	40.06.713P	Power supply	1
5	10.02.337P	Lock washer DIN6798-J M3 A2	4
6	10.00.144P	Socket cap screw M3x16mm	4
7	40.06.426P	Double level terminal block 16mm² blue	1
8	40.06.626P	Earth terminal WKFN 16 D1/2/SL/35	1
9	40.07.121P	End flask for block APFN 16 D1/2/35	1
11	40.06.933P	Double level earth terminal 6mm² yellow/green	1
15	4001.1203P	End plate for mounting rail	1
16	40.06.446P	Heat sink support	1
20	40.06.806S	Cooling fan	1
21	40.06.428P	Heat sink 1 SSR	5
22	40.01.589P	Solid state relais	8
23	10.02.263P	Raised countersunk head screw Torx M4x10 T20	16
24	40.01.589P	Solid state relais	1
25	10.02.263P	Raised countersunk head screw Torx M4x10 T20	2
26	10.01.339P	Fixing Elastomer	4
27	10.01.336P	Plastic spacer 7mm 12	11
28	40.07.421S	80mm fan protection grill with mounting set	1
29	40.07.372P	Locking device for heat sink	1
30	40.05.509P	Interface LAN IPX6	1
31	40.06.409P	Interface cable LAN 1.5m	1
32	40.00.701S	Screwed cable gland polyamid PG40	1

Pos.	Part no.	Description	Qty.
33	10.01.336P	Plastic spacer 7mm 12	4
39	10.02.376P	Cable tie 160mm with fir base	4
100	40.06.093P	Control harness	1
103	40.07.885P	Additional control harness SSR	1

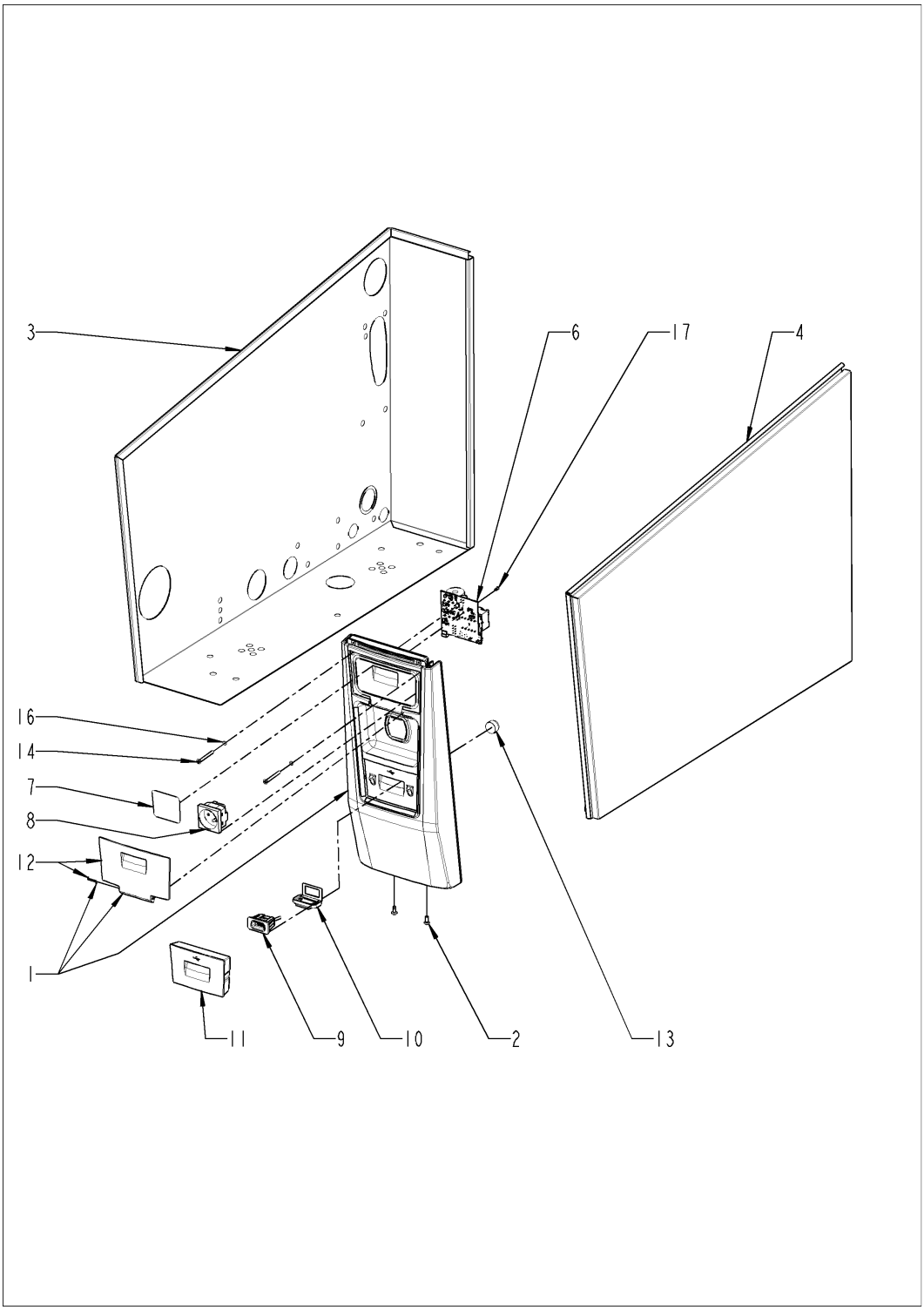
Pos. 3 Water distribution



Pos. 3 Water distribution

Pos.	Part no.	Description	Qty.
1	52.00.127S	Hand shower black	1
2	50.00.156P	Clamp f. hand shower roll guide	1
3	87.01.616S	Connection pipe hand shower roll guide	1
4	52.00.143P	Hand shower roll guide	1
5	52.00.105P	Hand shower roll guide water supply	1
6	50.00.085P	Retractor locking spring	2
7	50.02.322	Reinforced silicon hose ø10x3mm	1.1
8	52.00.017P	Angle plug PS3 6-6-90°	2
9	50.02.063P	Double solenoid valve block with flowmeter	1
10	50.02.114P	Fitting 3/4" M/M	1
11	1900.0202P	Water filter	1
13	50.02.094P	Water supply pipe	1
14	10.01.669P	Slot counter head secur screw M5X20 Phillips	3
18	10.02.239P	Hose clamp clic R86-145	6
19	50.02.324P	Gasket for water supply coupling 38x28	1
20	50.02.325P	Fixing nut 3/4"	1
21	54.01.985P	T-fitting D10	1
22	50.02.322	Reinforced silicon hose ø10x3mm	.05
23	50.02.322	Reinforced silicon hose ø10x3mm	.12
24	50.02.176P	Hose clamp clic R96-165	2
100	40.07.208P	Flowmeter cable	1

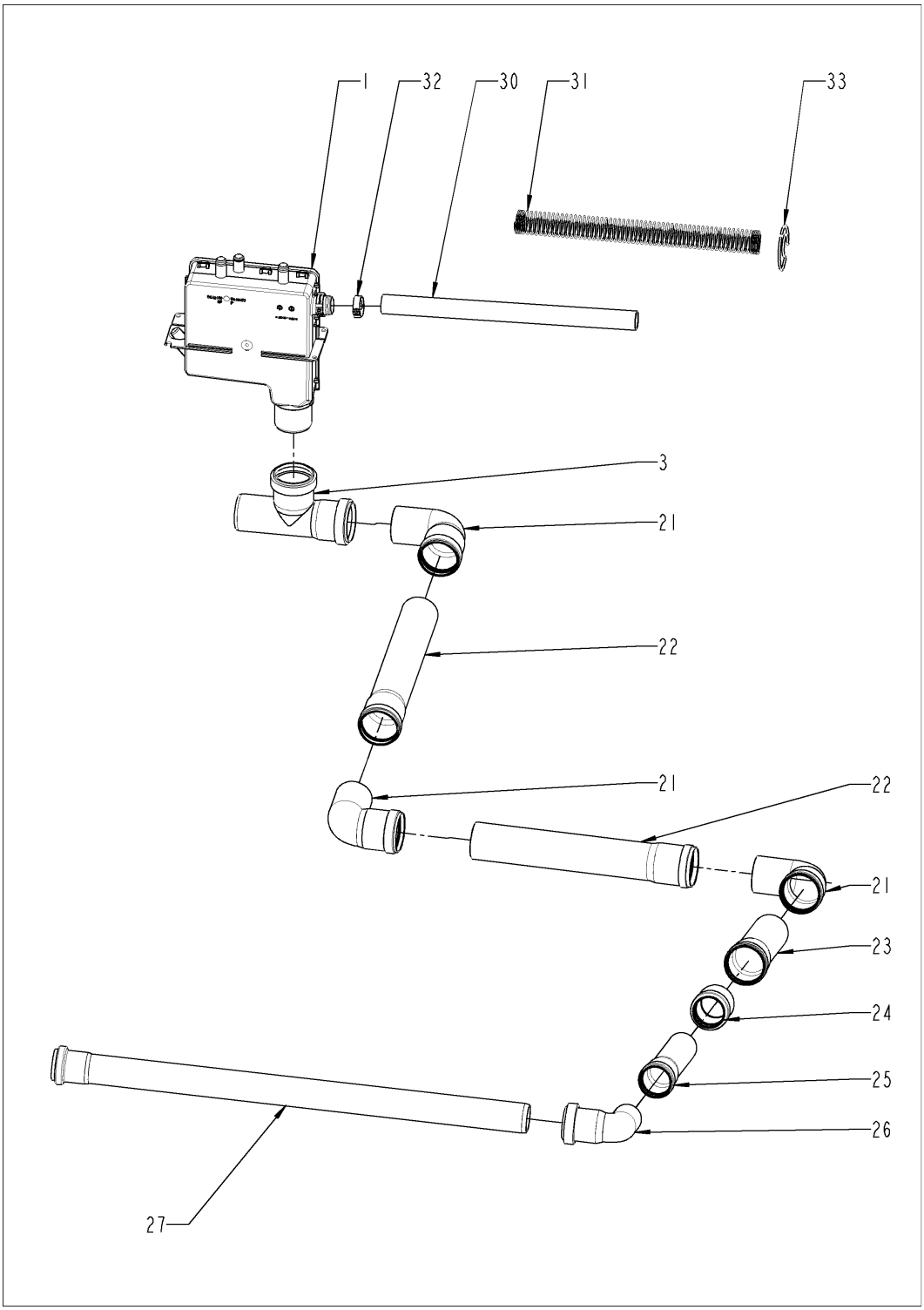
Pos. 4 Console



Pos. 4 Console

Pos.	Part no.	Description	Qty.
1	16.03.491P	Front panel console	1
2	10.01.912P	Crosshead screw M5x12	2
3	16.03.553P	Side panel left for console	1
4	16.03.554P	Side panel right for console	1
6	42.00.356P	Protection board for socket outlet protection	1
7	16.04.236P	Shutter sticker option without differential protection	1
8	40.01.409P	Socket 2P+T 16A (France)	1
9	40.06.583P	Interface cable USB 1,4m	1
10	40.06.045P	USB socket cover	1
11	16.03.878P	Front panel cover for USB assembly	1
12	16.03.997P	Socket flap	1
13	24.02.804P	Magnet 22x10mm	1
14	10.01.923P	Counter head screw M5x45 DIN965-H	2
16	10.02.001P	Gasket D4/8 x1	2
17	10.01.899P	Pan head screw Torx Delta PT WN5412 30x8 A2	1

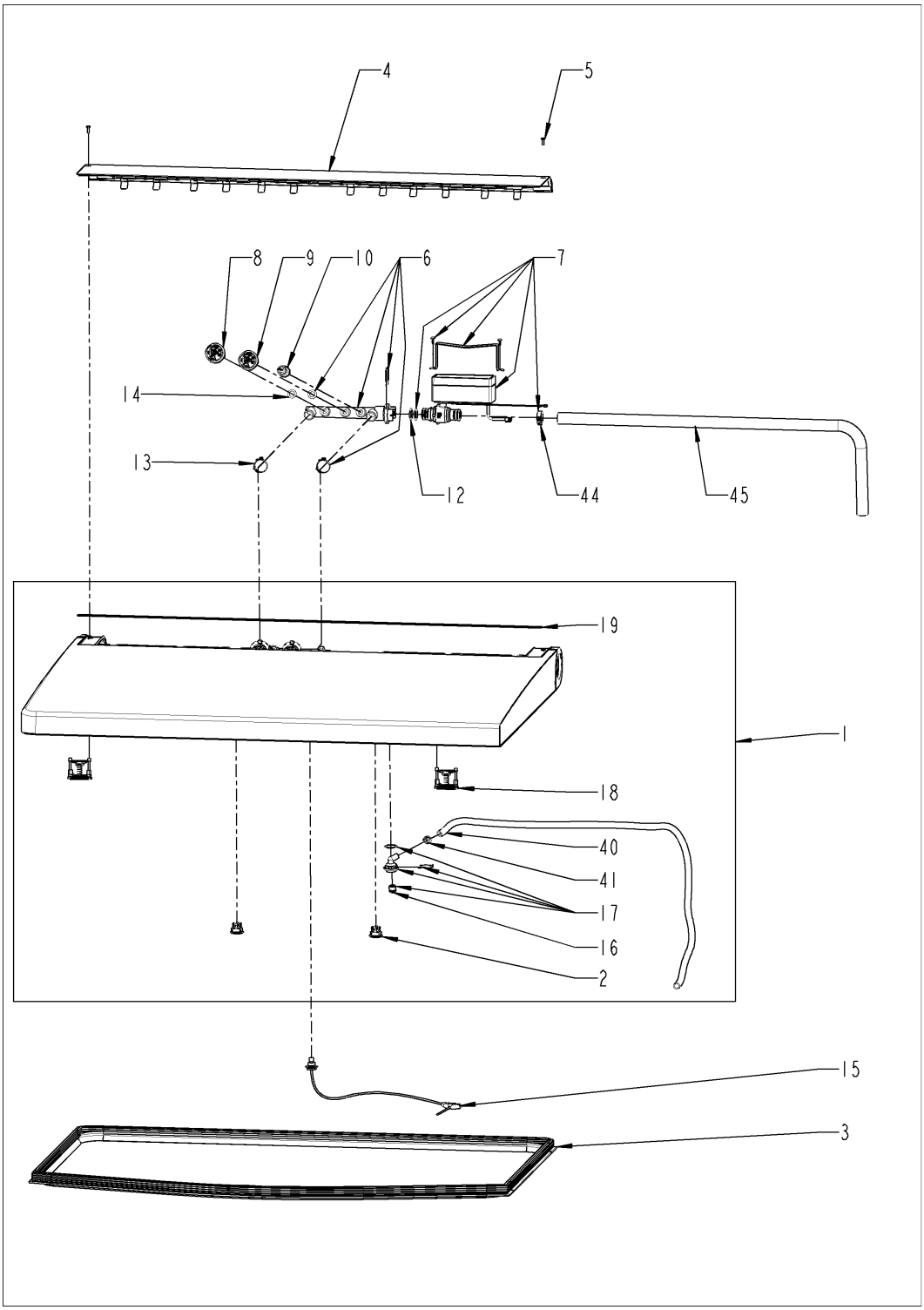
Pos. 5 Water drain



Pos. 5 Water drain

Pos.	Part no.	Description	Qty.
1	54.01.978P	Control chamber	1
3	2070.0048P	HT drain T-fitting 50mm	1
21	54.00.560P	Elbow-pipe PP DN50 87°	3
22	54.00.755P	Pipe PP DN50 x 250	2
23	54.00.564P	PP-Pipe DN50 x 150mm	1
24	50.00.680P	Bushing PP D50/D40	1
25	54.00.567P	PP-Pipe DN40 x 150mm	1
26	54.00.575P	Elbow-pipe PP DN40 87.5°	1
27	20.03.500P	Pan drain pipe	1
30	54.02.122	Conductive silicone hose diameter 20/26mm	1.36
31	50.02.072P	Holding spring	1
32	10.02.240P	Hose clamp clic R96-290	1
33	24.05.622P	Spring stop	1

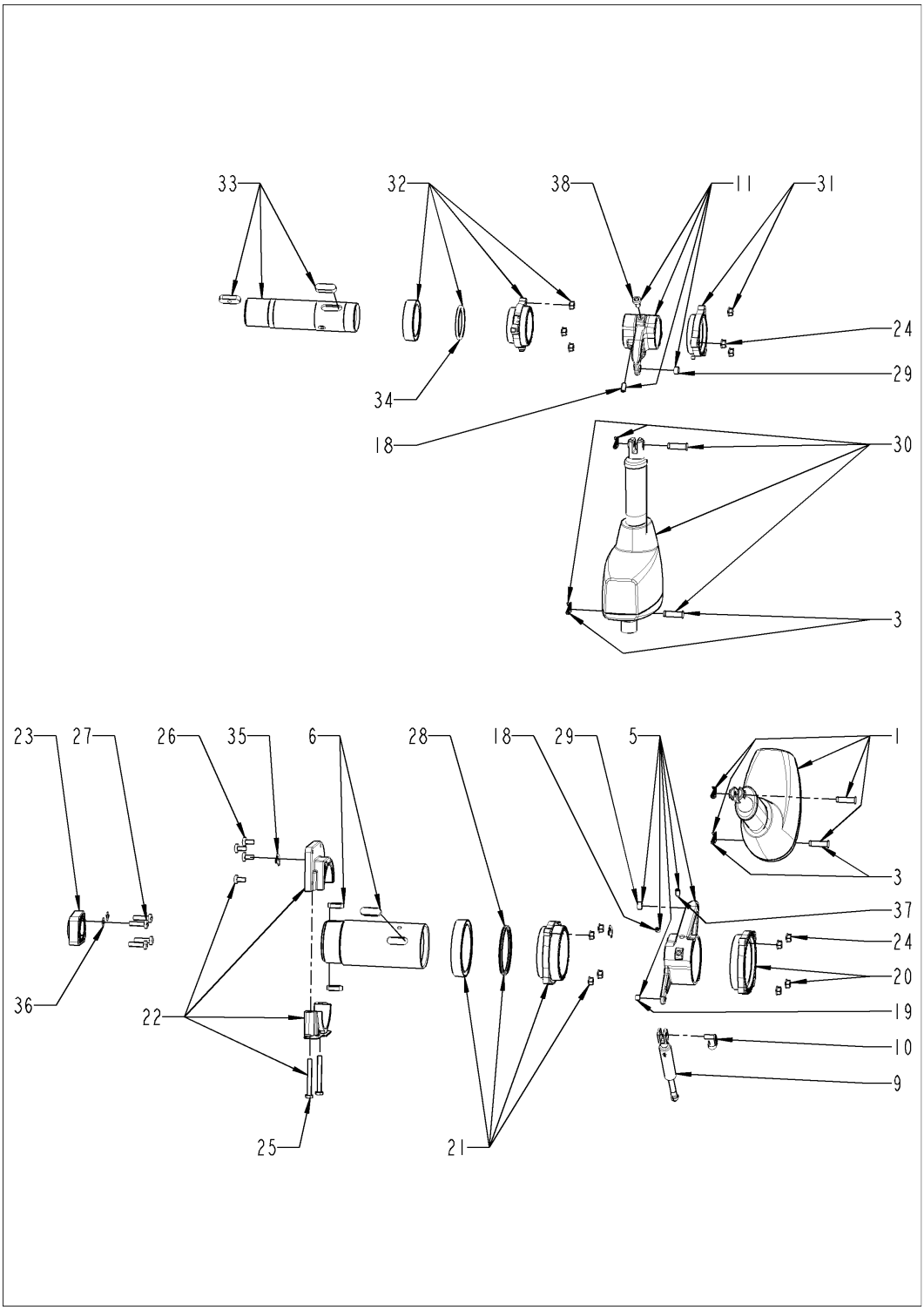
Pos. 6 Lid



Pos. 6 Lid

Pos.	Part no.	Description	Qty.
1	24.03.581P	Lid	1
2	24.04.054P	Cover for pressure connection	2
3	24.04.954P	Lid gasket	1
4	24.04.046P	Inspection cover for lid	1
5	10.01.808P	Hex socket countersunk head screw M5x16	2
6	87.01.975S	Pressure module left with pressure switches	1
7	87.01.836S	Pressure control valve	1
8	87.01.975S	Pressure module left with pressure switches	1
9	87.01.975S	Pressure module left with pressure switches	1
10	54.01.771P	Pressure sensor	1
12	54.02.082P	O-ring for ball valve 21,5 x 3	2
13	10.02.087P	Hose clamp clic R96-285	2
14	54.02.103P	Flat gasket 16,5x11,6x1,5mm	2
15	40.07.165S	Core temperature probe	1
16	50.02.248S	Aerator with service key	1
17	87.01.617S	Filling nozzle left cover	1
18	24.04.432P	Locking orifice plug	2
19	10.01.376	Gasket 1x10mm	1.1
40	50.02.322	Reinforced silicon hose ø10x3mm	1.2
41	10.01.132P	Hose clamp clic R86-140	1
44	10.02.240P	Hose clamp clic R96-290	1
45	54.02.122	Conductive silicone hose diameter 20/26mm	1.36

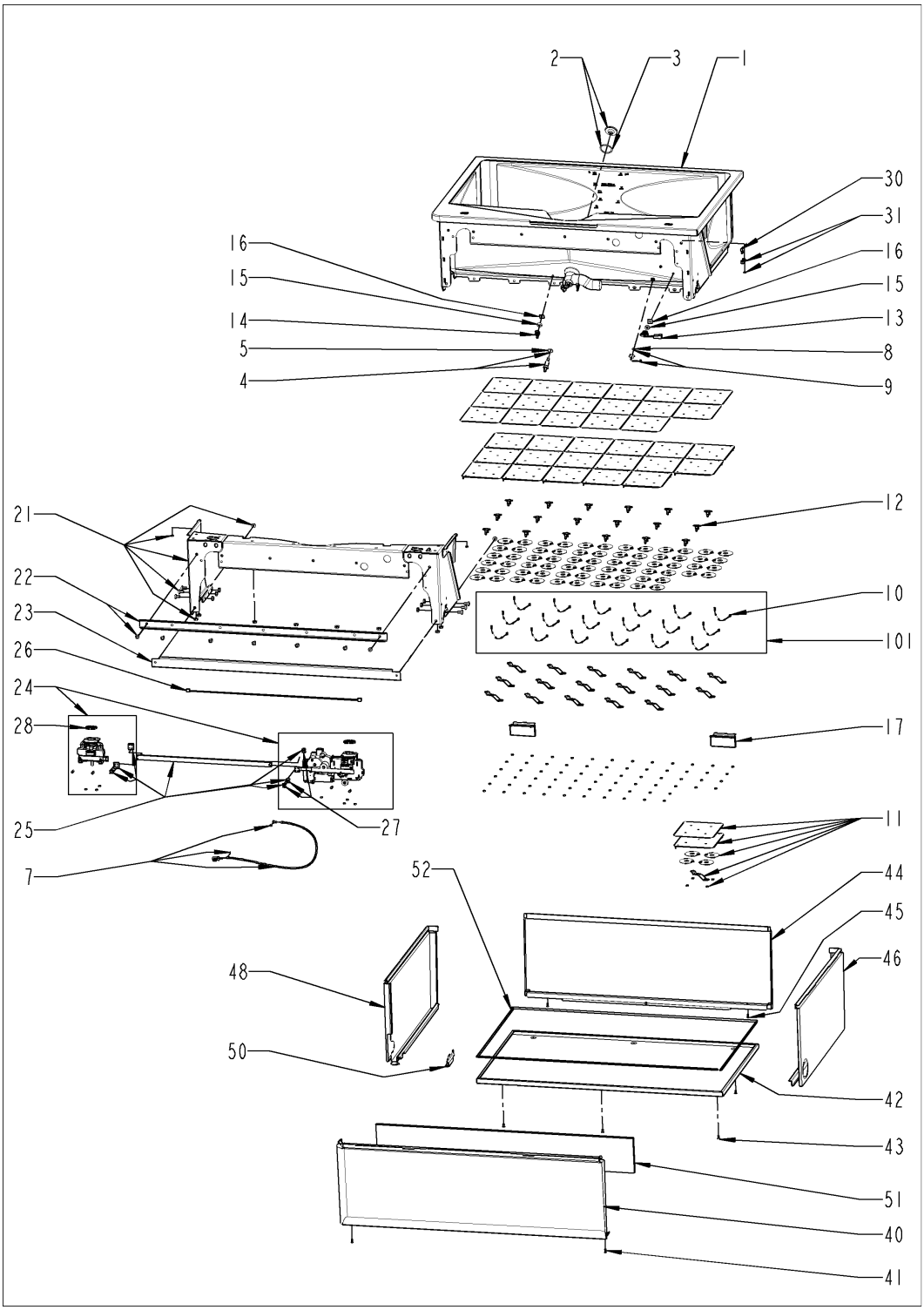
Pos. 7 Kinematic



Pos. 7 Kinematic

Pos.	Part no.	Description	Qty.
1	20.03.297S	Lifting cylinder for pan	1
1.1	40.06.578P	Set of power supply cables for pan and lid cylinders	1
3	20.02.653S	Shaft hoist swing shaft 10x38	4
5	20.03.857S	Lift arm for pan	1
6	20.03.190S	Pan shaft	1
9	20.03.743P	Gas spring 1000N	1
10	10.02.168P	Fixture security for gas spring	1
11	24.05.625S	Arm raising lid	1
18	10.01.833P	Hexagon socket set screws with flat point M8x14	1
19	24.02.753P	Flange Bearing GSM-0809-08	1
20	20.03.382S	Inner bearing for pan	1
21	20.03.331S	Bearing for pan	1
22	87.01.603S	Pan clamping bearing assembly	1
23	20.02.892P	Bearing left for pan	1
24	10.01.851P	Collar nut M8 locking teeh	14
25	10.00.750P	Hex screw M8x70	2
26	10.01.616P	Pan head screw Torx T40 M8x16	4
27	10.01.826P	Cylinder head screw torx T40 M8x30	4
28	12.02.398P	X-ring 85x5.33	1
29	10.01.468P	Sintered bronze bushings	2
30	24.04.352S	Lifting cylinder for lid	1
30.1	40.06.578P	Set of power supply cables for pan and lid cylinders	1
31	24.04.455S	Cover bearing	1
32	24.04.424S	Lid bearing with sealing ring	1
33	24.04.418S	Cover shaft	1
34	12.02.399P	X-ring 55x5.33	1
35	20.03.887P	Key stop	1
36	1308.0160P	Washer M8 A2	2
37	10.02.437P	Hex socket set screw with dog point M8x16 Din915	1
38	10.01.616P	Pan head screw Torx T40 M8x16	1

Pos. 8 Pan

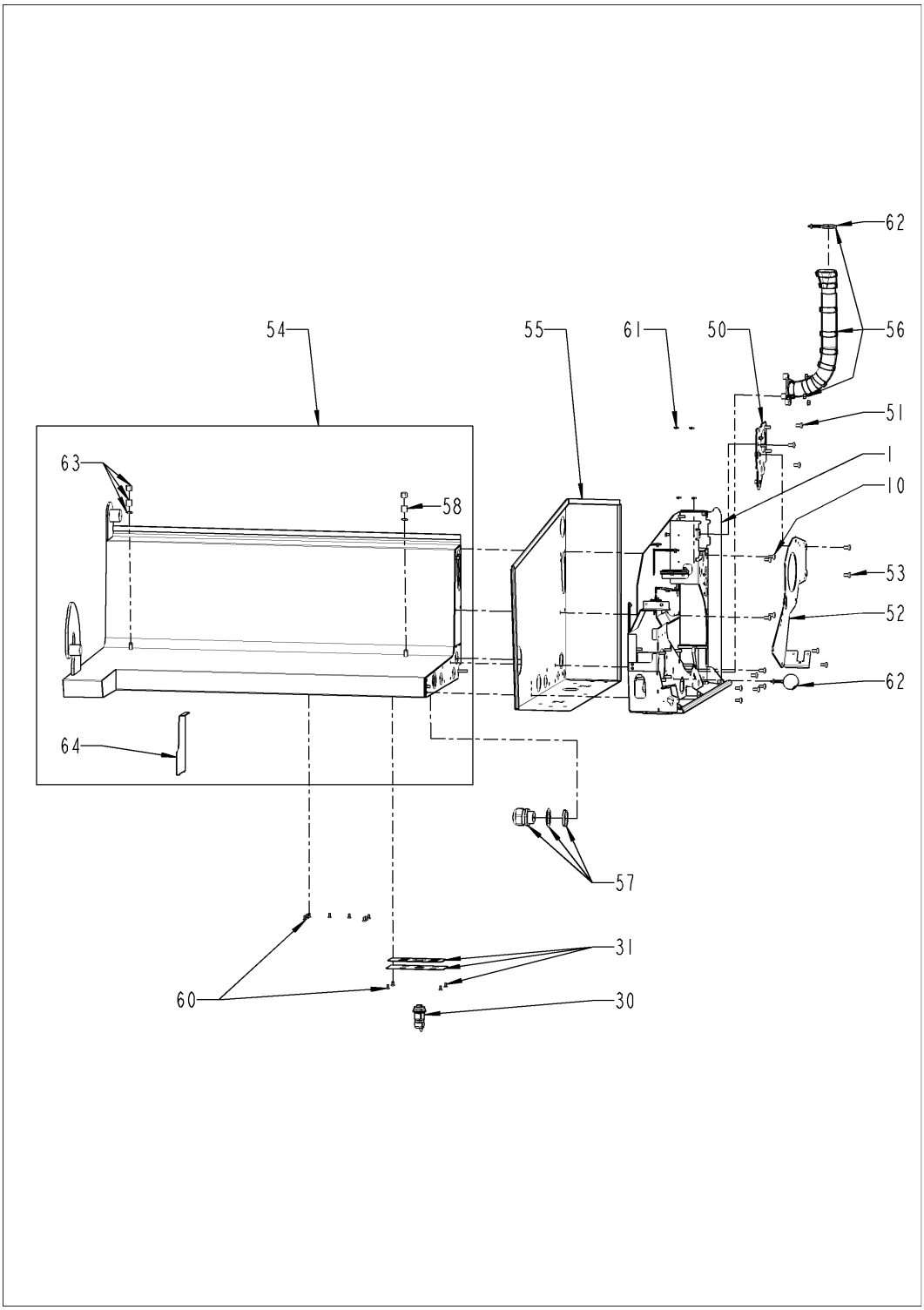

2
3
1
30
31
16
15
14
13
5
8
4
9
21
12
22
10
23
101
26
24
28
17
25
27
11
7
52
44
45
48
46
50
42
43
51
40
41

Pos. 8 Pan

Pos.	Part no.	Description	Qty.
1	87.01.607S	Kit pan with pressure	1
1.1	10.02.267P	Gasket 3x10mm	3.8
2	20.01.653S	Plug for pan valve with gasket	1
3	20.00.993P	Gasket for plug pan valve	1
4	20.01.587S	Sheath for pan valve	1
5	10.00.675P	O-ring f. pan valve 17.3 x 2.4	1
7	20.03.450S	Pan valve cable pan left	1
8	20.03.600P	O-ring 9.8x1.5	1
9	40.06.857S	Thermocouple pan left	1
10	87.00.339	Thermocouple for heating element	1
11	87.00.674	Conversion kit heating element 2287W 230V	18
12	40.04.370P	Safety temperature limiter heating element	18
13	40.04.501P	Safety temperature limiter 130°	1
14	40.02.337P	Safety temperature limiter 215°C	1
15	20.01.508P	Spacer for safety temperature limiter	2
16	20.01.518P	Graphit plate for safety temperature limiter	2
17	20.03.024P	Stop for pan	2
21	20.03.656S	Front reinforcement of pan headband	1
22	20.03.630S	Transverse pan reinforcement	1
23	20.03.504P	Pan reinforcement	1
24	87.01.564S	Lid locking assembly	1
25	20.03.342S	Master-slave link assembly	1
26	40.06.881P	Master-slave connection cable	1
27	20.03.696P	Connecting link ISO06B-1 Form E	1
28	20.03.705P	Gasket for lid locking assembly	2
30	40.06.458P	Magnetic contact	1
31	20.03.667S	Magnetic contact support	1
40	16.03.711P	Front panel for pan with insulation	1
41	10.01.808P	Hex socket countersunk head screw M5x16	2
42	16.03.489P	Lower panel for pan	1

Pos.	Part no.	Description	Qty.
43	10.01.808P	Hex socket countersunk head screw M5x16	6
44	16.03.830P	Back panel for pan	1
45	10.01.808P	Hex socket countersunk head screw M5x16	2
46	16.03.556P	Side panel right of pan	1
48	16.03.372P	Side panel left of pan	1
50	20.03.254P	Mounting piece for pan panel	1
51	20.03.475P	Pan front insulation	1
52	20.03.466P	V-profile gasket	3.8
100	40.05.947P	Power harness heating element	1
101	40.05.933P	Thermocouple harness	1

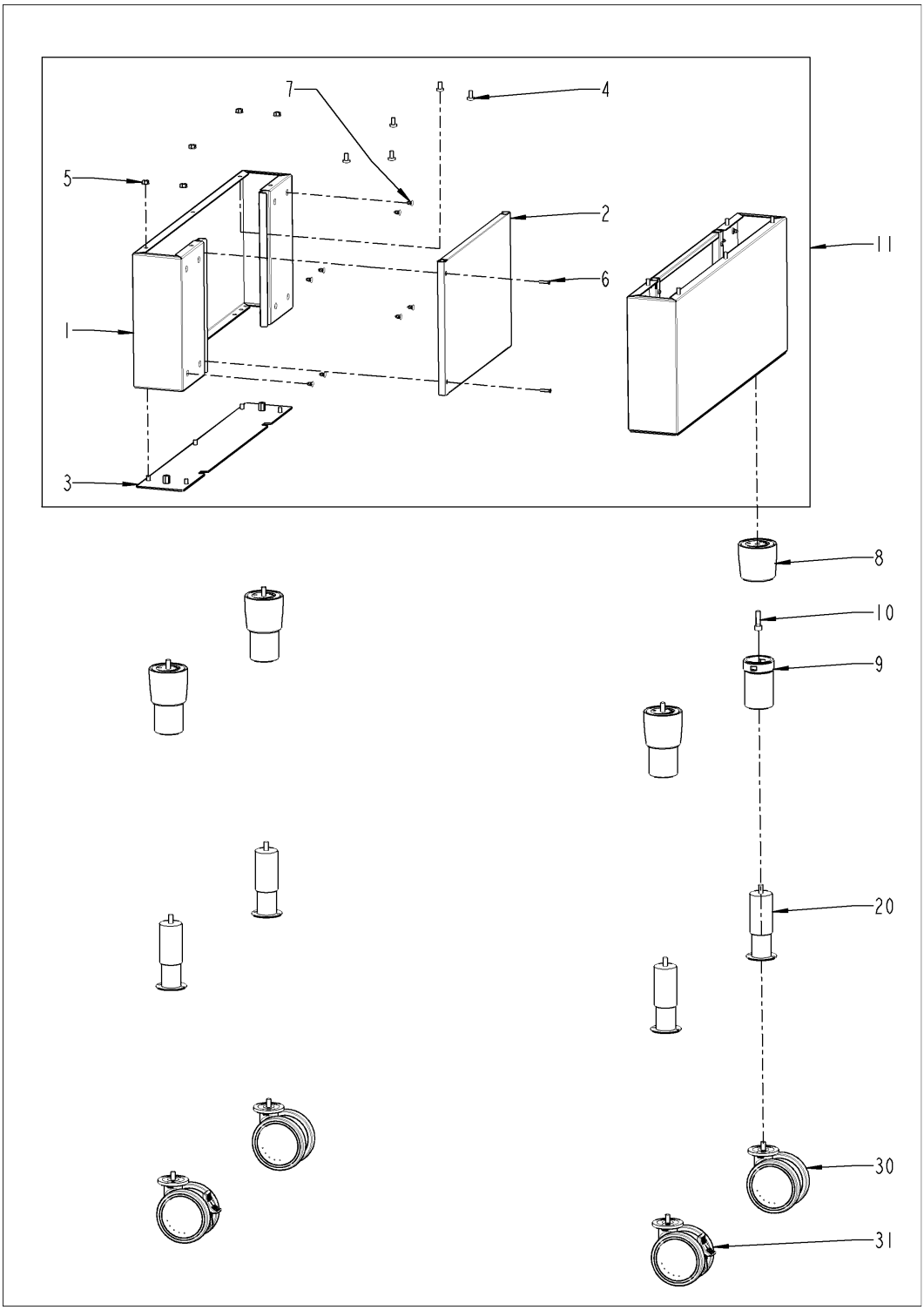
Pos. 9 Base structure



Pos. 9 Base structure

Pos.	Part no.	Description	Qty.
1	87.01.928S	Chassis right	1
10	10.01.616P	Pan head screw Torx T40 M8x16	10
30	40.05.509P	Interface LAN IPX6	1
31	12.02.440S	Cable gland mounting plate	1
50	12.03.146P	Removable part of the right frame	1
51	10.01.616P	Pan head screw Torx T40 M8x16	5
52	12.03.120P	Shower roll guide holder	1
53	10.01.616P	Pan head screw Torx T40 M8x16	4
54	12.02.449P	Chassis left 211/311	1
55	16.03.553P	Side panel left for console	1
56	12.03.169S	Guide tube for a supply cable	1
57	40.00.701S	Screwed cable gland polyamid PG40	1
60	10.01.912P	Crosshead screw M5x12	14
61	10.02.198P	Plastic spacer 7mm for 3mm thickness	4
62	10.02.082P	Fir foot clamp for pipe Ø50	2
63	12.01.086S	Stop for pan on cross frame	1
64	16.03.769S	Chassis rear cover	1

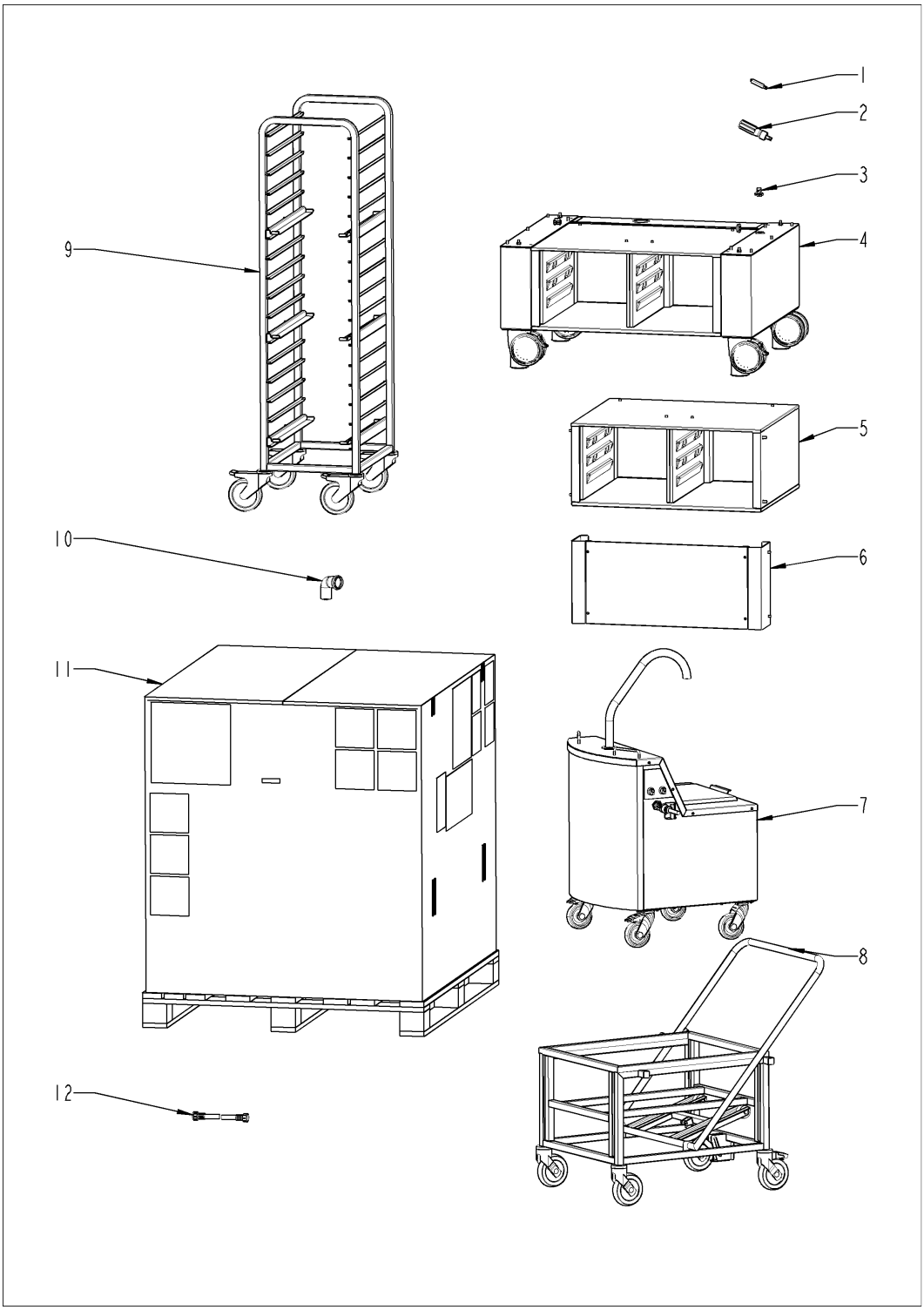
Pos. 10 Underframe



Pos. 10 Underframe

Pos.	Part no.	Description	Qty.
1	60.74.416P	Substructure body	2
2	60.74.474P	Substructure hatch	2
3	60.74.536P	Substructure bottom plate	2
4	10.01.616P	Pan head screw Torx T40 M8x16	10
5	10.01.851P	Collar nut M8 locking teeh	10
6	10.01.669P	Slot counter head secur screw M5X20 Phillips	4
7	10.01.928P	Plug 6.6 for threaded hole M8	16
8	12.00.205P	Upper part of pedestal	4
9	12.00.224P	Lower part of pedestal 110mm	4
10	10.01.953P	Socket cap screw M10x35 A2 Tuflok	4
11	87.01.793S	Retrofit substructure body assembly	1
20	12.03.051P	Adjustable stainless foot	4
30	60.74.680P	Castor without brake ø125mm	2
31	60.74.681P	Castor with brake ø125mm	2
32	60.71.229P	Washer Ø70 castor VCC	4

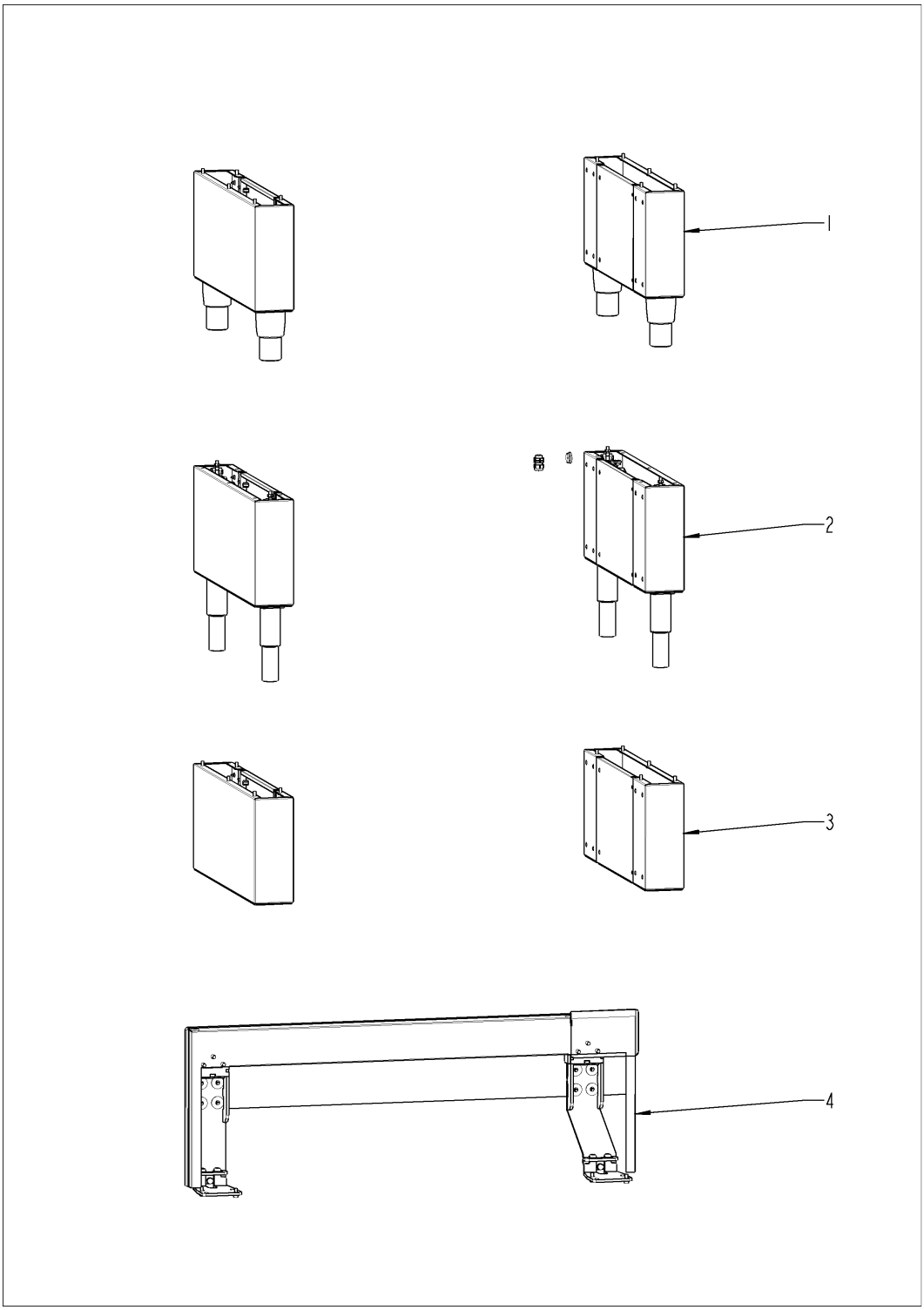
Pos. 20 Accessories



Pos. 20 Accessories

Pos.	Part no.	Description	Qty.
1	87.01.758	Memory-Stick USB iVario	1
2	W24001	Dynamometric screwdriver 4Nm	1
3	50.02.319P	Aerator service key	1
4		Installation variants	1
5		Storage space for substructure	1
6		Panelling for substructure	1
7		Oil cart	1
8		VarioMobil	1
9		Basket cart	1
10	87.00.746	Waste water connection kit	1
11	90.00.958	Complete packaging	1
12	50.01.711P	Hose for water supply 1500mm	1

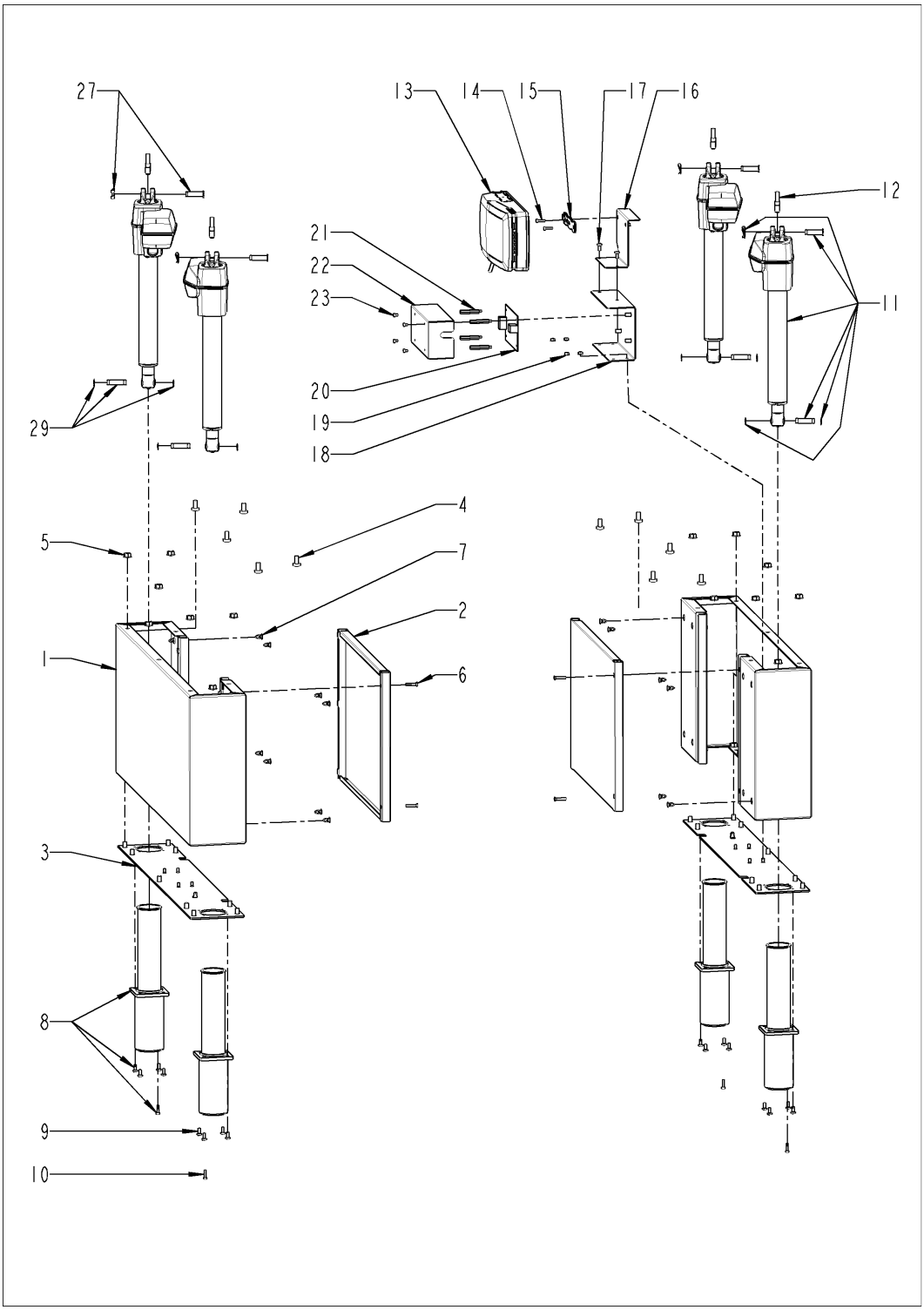
Pos. 4 Installation variants



Pos. 4 Installation variants

Pos.	Part no.	Description	Qty.
2		Stand with electric height adjustment	1
3		Base installation kit	1
4		Wall attachment kit	1

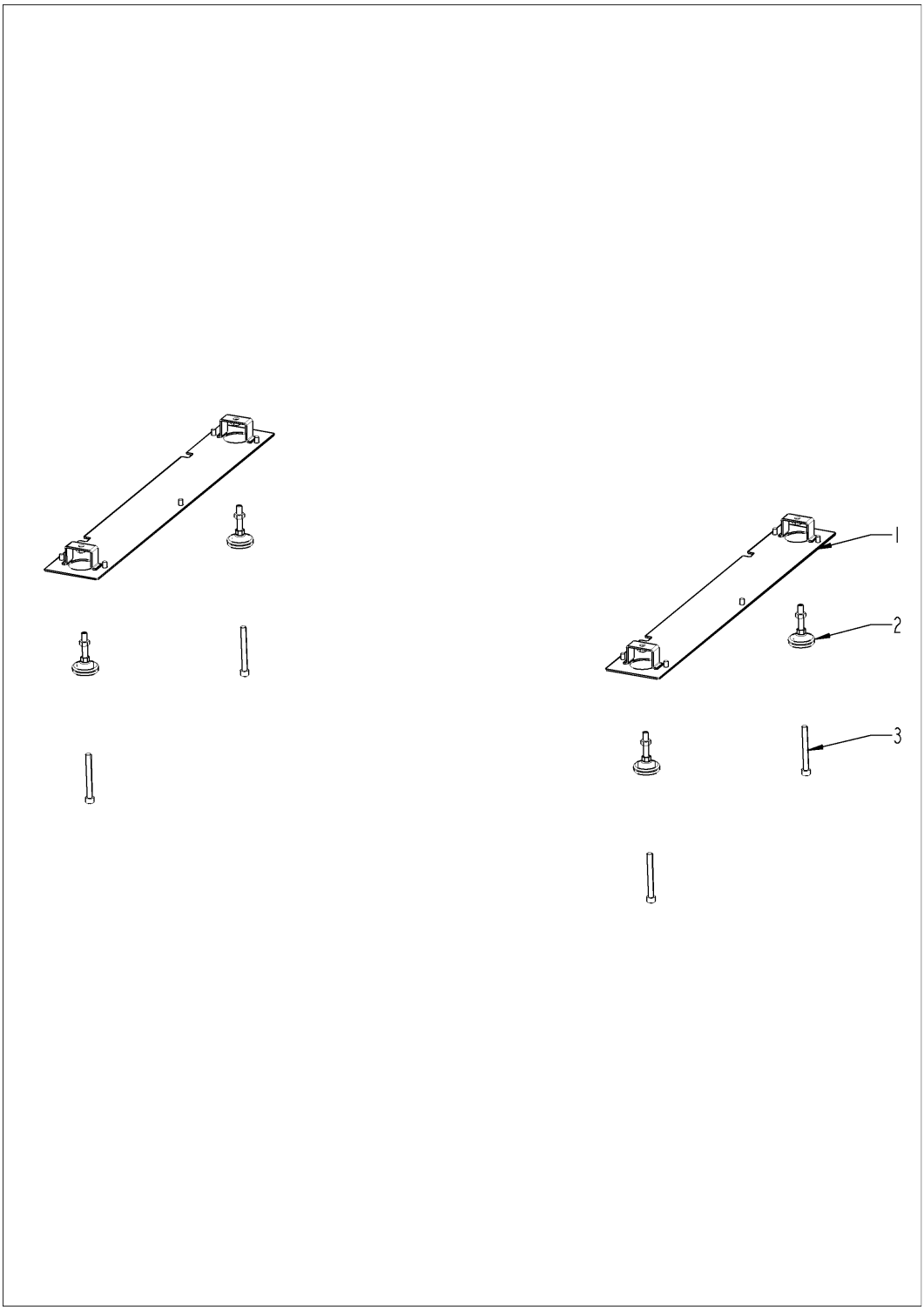
Pos. 2 Stand with electric height adjustment



Pos. 2 Stand with electric height adjustment

Pos.	Part no.	Description	Qty.
1	60.74.416P	Substructure body	2
2	60.74.474P	Substructure hatch	2
3	60.77.065P	Bottom plate for a height-adjustable substructure	2
4	10.01.616P	Pan head screw Torx T40 M8x16	10
5	10.01.851P	Collar nut M8 locking teeh	18
6	10.01.669P	Slot counter head secur screw M5X20 Phillips	4
7	10.01.928P	Plug 6.6 for threaded hole M8	16
8	60.74.713S	Telescopic foot	4
9	10.01.912P	Crosshead screw M5x12	16
10	10.01.778P	Pan head screw Torx M4x16	4
11	87.01.759S	Lifting cylinder for height adjustable substructure	4
12	60.74.853P	Eye socket with threaded shank M8x20	4
13	42.00.305S	Module CO61	1
14	10.01.778P	Pan head screw Torx M4x16	2
15	42.00.342P	Holder for module CO61	1
16	42.00.351P	CO61 module carrier	1
17	10.01.912P	Crosshead screw M5x12	2
18	42.00.374P	Converter holder part 1	1
19	10.01.054P	Hexagonal nut with notched flange M5	4
20	42.00.352P	RS232 converter for adjustable height	1
21	10.02.121P	Hexagonal spacer M4x40	4
22	42.00.375P	Converter protection cover	1
23	10.00.061P	Pan head screw Torx T20 M4x12	4
27	20.02.653S	Shaft hoist swing shaft 10x38	4
29	10.01.913S	Shaft for jack LA40	4
30	54.02.056P	Flexible drain pipe DN50	1
100	40.07.175P	Power + bus cable for height-adjustable substructure W21	1
102	40.06.762P	Short power supply cable height adjustable cylinder W67	2
103	40.06.763P	Cylinder connection cable to CO61 module W69	2
104	40.06.765P	Connection cable CO61 - RS232 converter W68	1

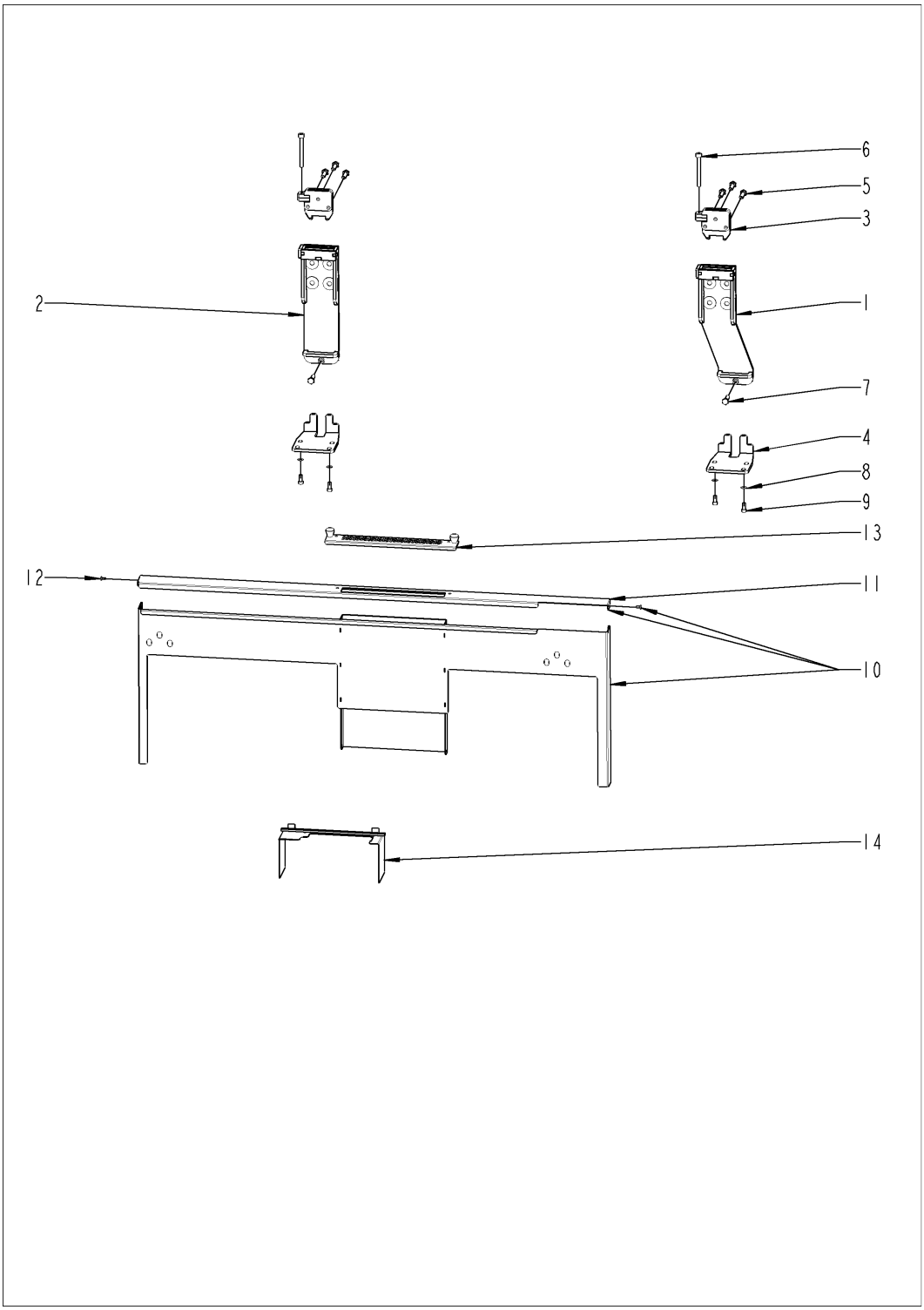
Pos. 3 Base installation kit



Pos. 3 Base installation kit

Pos.	Part no.	Description	Qty.
1	60.77.230P	Substructure bottom plate for base kit	2
2	60.77.995P	Adjustable foot for base installation kit	4
3	10.02.084P	Allen screw M10x90	4

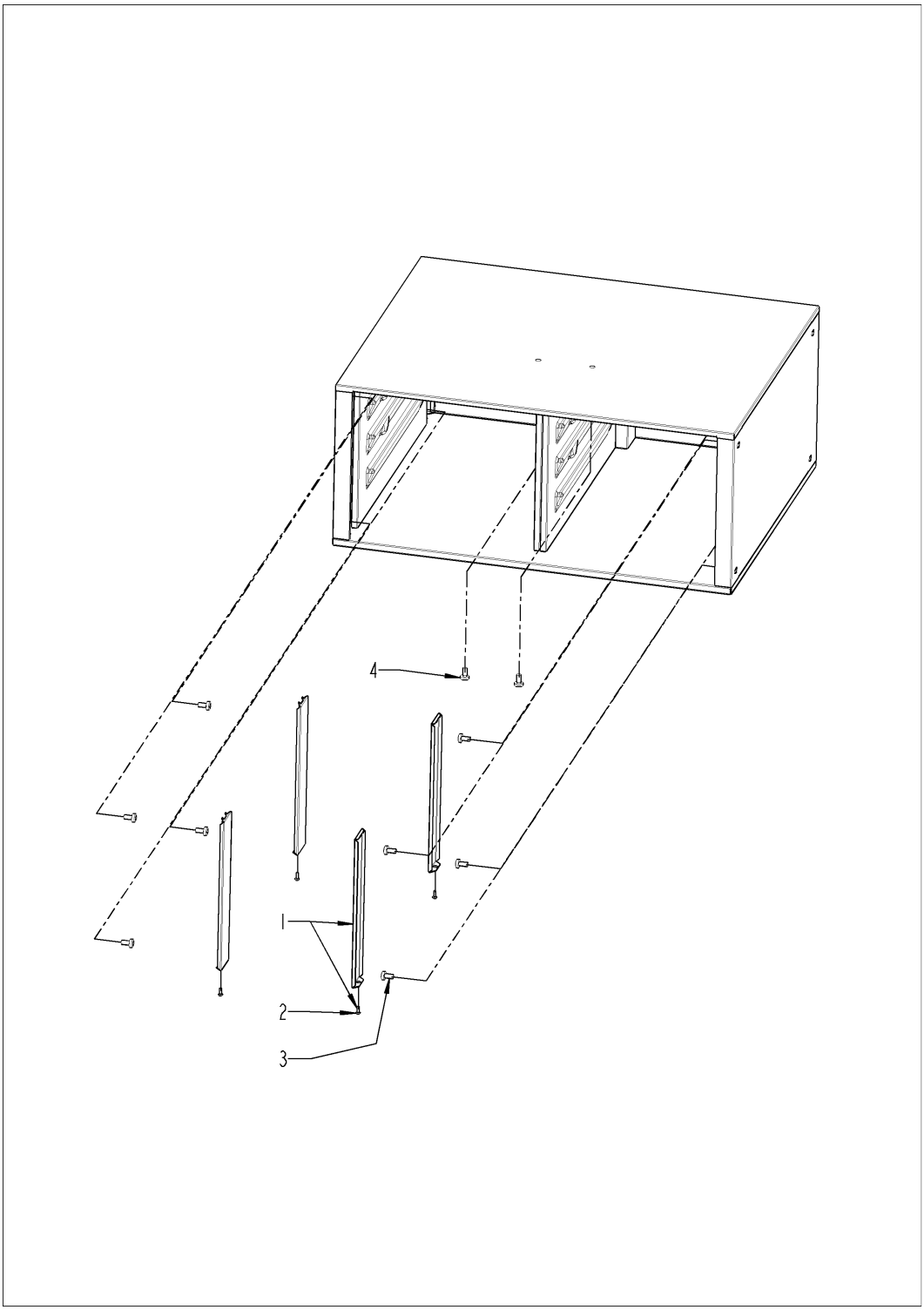
Pos. 4 Wall attachment kit



Pos. 4 Wall attachment kit

Pos.	Part no.	Description	Qty.
1	60.75.926P	Right wall bracket	1
2	60.75.944P	Left wall bracket	1
3	60.75.931P	Wall mounting hook	2
4	60.75.939P	Locking bracket	2
5	1010.0763P	Hex screw M10x40	6
6	10.02.084P	Allen screw M10x90	2
7	1010.0763P	Hex screw M10x40	2
8	1308.0160P	Washer M8 A2	4
9	10.01.241P	Allen screw M8x20	4
10	60.75.920P	Wall mounting panelling	1
11	60.77.745P	Cover panel for wall support panelling	1
12	10.01.912P	Crosshead screw M5x12	2
13	60.77.518P	Ventilation grille for wall support panelling	1
14	60.77.836P	Wall support steam guide	1

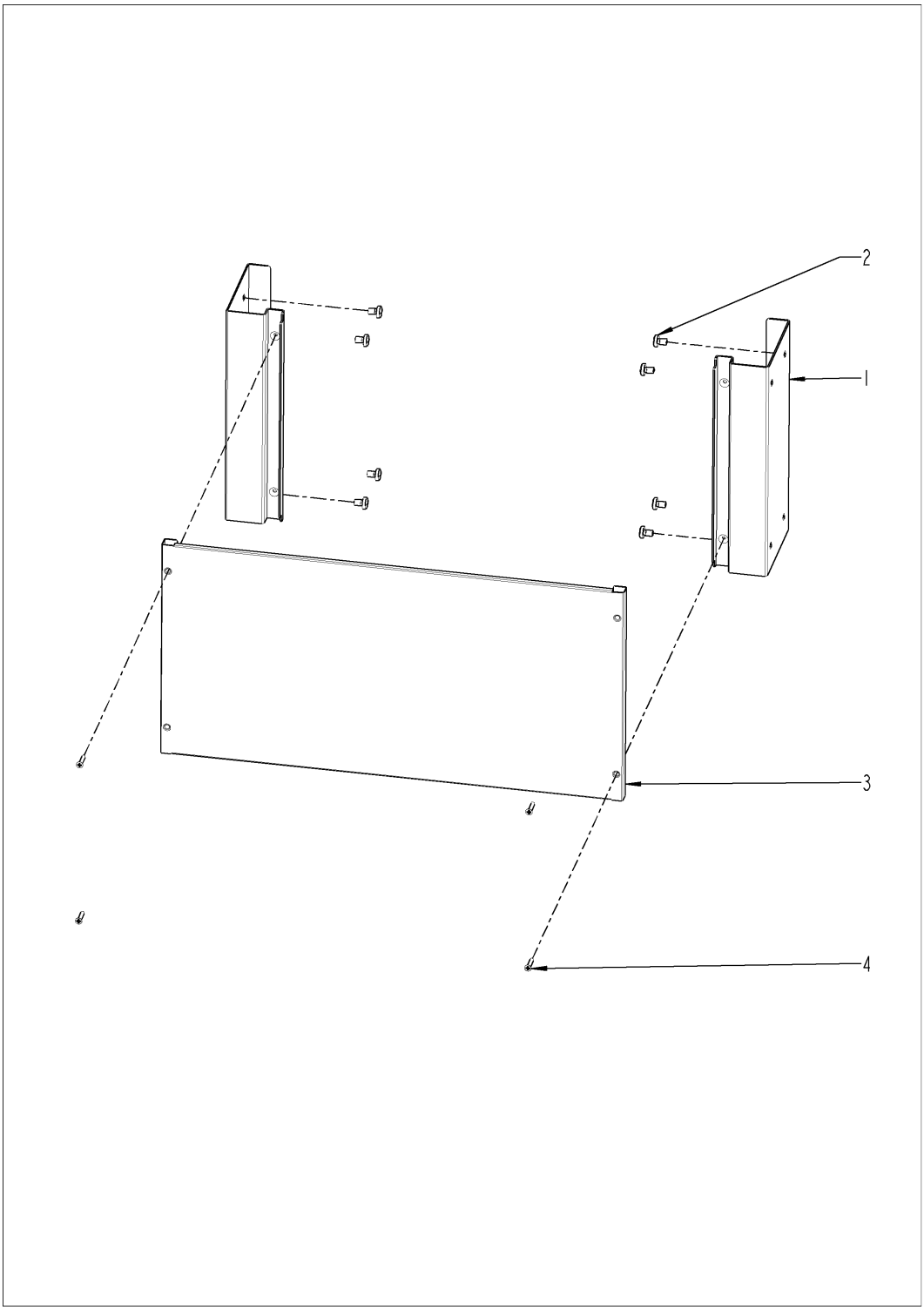
Pos. 5 Storage space for substructure



Pos. 5 Storage space for substructure

Pos.	Part no.	Description	Qty.
1	60.76.629S	Side hatch for storage space	4
2	10.01.776P	Pan head screw Torx T20 M4x12	4
3	10.01.616P	Pan head screw Torx T40 M8x16	8
4	10.02.033P	Hex screw M8x40	2

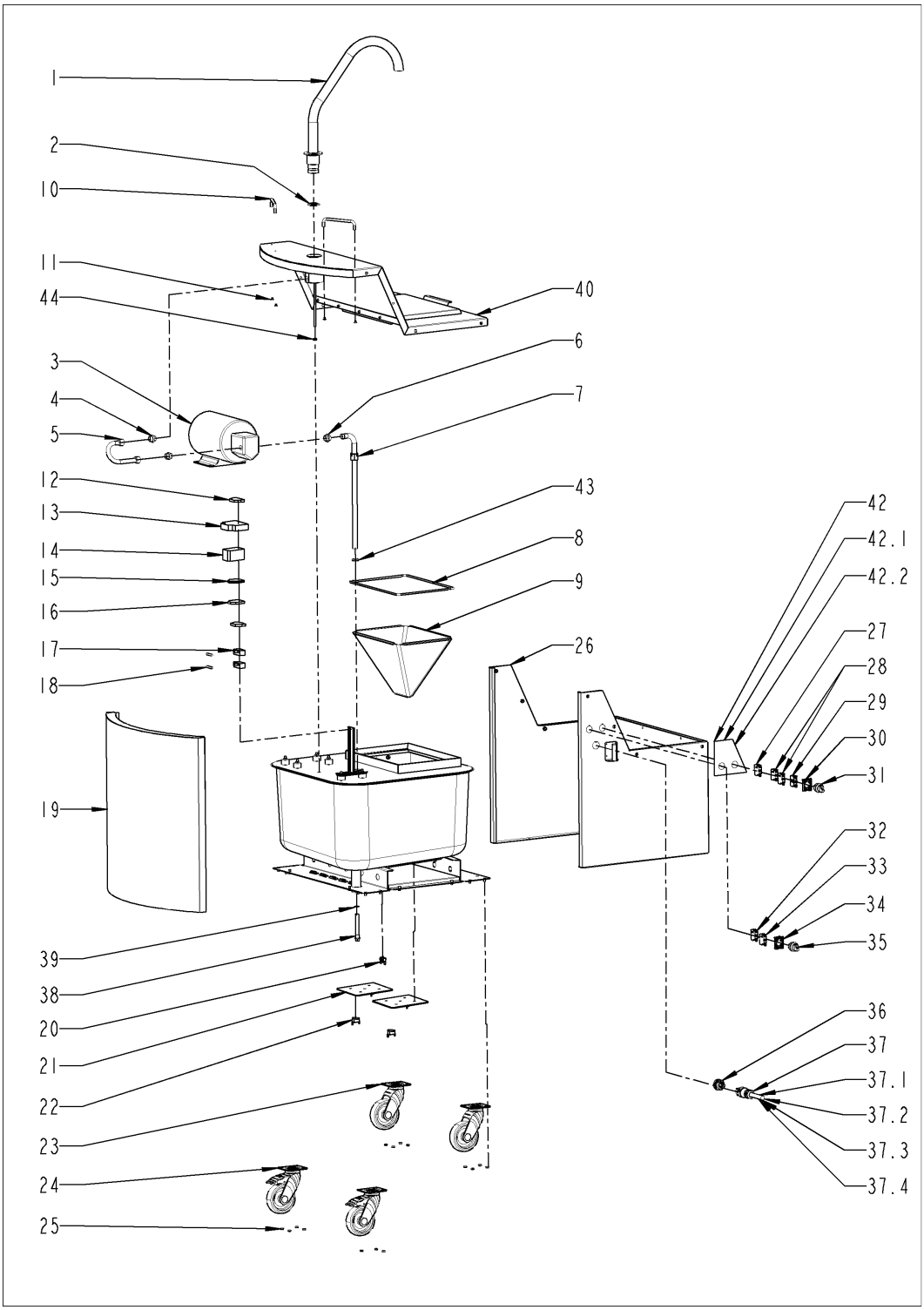
Pos. 6 Panelling for substructure



Pos. 6 Panelling for substructure

Pos.	Part no.	Description	Qty.
1	60.76.098P	Substructure panelling support	2
2	10.02.025P	Crosshead screw M8x12	8
3	60.76.100P	Substructure cover plate	1
4	10.01.669P	Slot counter head secur screw M5X20 Phillips	4

Pos. 7 Oil cart

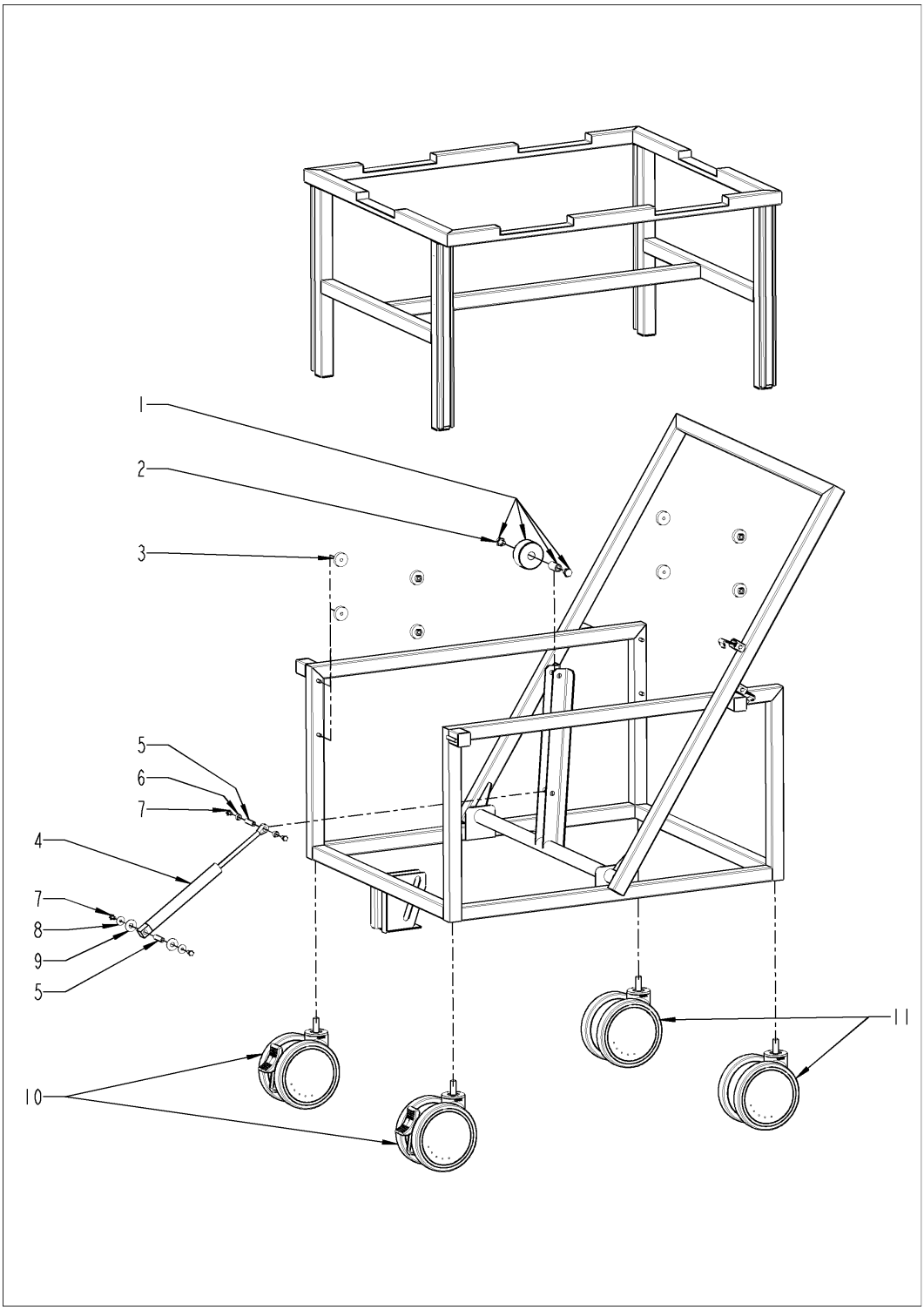


Pos. 7 Oil cart

Pos.	Part no.	Description	Qty.
1	82.00.247	Kit filling pipe	1
1.01	82.00.674P	Filling pipe for 100mm extension	1
2	82.00.240	O-ring 34x3	1
3	82.00.235	Kit pump	1
4	82.00.243	Hex double nipple G 3/8"	2
5	82.00.291	Flexible pipe 350mm for oil troley	1
6	82.00.268	Hex nipple M3/8"-F1/4"	1
7	82.00.246	Suction pipe complete	1
8	60.71.850	Support of oil filter	1
9	60.71.599	Oil filter	1
10	2610.400279F	Handle	1
11	1004.0665F	Allen screw M4x6	2
12	82.00.250	End plate for mounting rail	2
13	82.00.254	Timing relay	1
14	40.02.917	Contactor 3TG1010-2AK2	1
15	82.00.248	Terminal block 4mm²	1
16	82.00.249	Terminal block 4mm² blue	1
17	82.00.251	Fuse holder	2
18	4001.0226V	Fuse 6.35x32mm 16A, time-lag	2
19	82.00.288	Round panel	1
20	40.02.337	Safety temperature limiter 215°C	1
21	82.00.265	Kit heating element	1
22	82.00.261	Klixon 240°	2
23	82.00.230	Castor without brake	2
24	82.00.231	Castor with brake	2
25	1105.0121V	Hex combination nut M5 galv	16
26	82.00.289	External panel	1
27	82.00.259	Contact NC	1
28	82.00.258	Contact NO	2
29	82.00.260	Blue Led indicator	1

Pos.	Part no.	Description	Qty.
30	82.00.257	Adaptator for contact element	1
31	82.00.255	Selector 2 positions lighted	1
32	82.00.258	Contact NO	1
33	82.00.259	Contact NC	1
34	82.00.257	Adaptator for contact element	1
35	82.00.256	Selector 3 positions spring return	1
36	82.00.300	Connector for socket-outlet	1
37	40.04.518	Spiral cable FR/DE	1
37.1	40.04.519	Spiral cable UK	1
37.2	40.04.520	Spiral cable CH	1
37.3	40.04.522	Spiral cable AUS	1
37.4	40.04.521	Spiral cable DK	1
38	60.74.412	Drain plug oil reserve	1
39	60.99.244	Drain plug gasket	1
40	60.71.704	Lid complete oil cart	1
41	82.00.617	Insulation set for oil cart	1
42	82.00.363	Overlay FRIMA oil cart	1
42.1	60.74.940	Overlay RATIONAL oil cart	1
42.2	82.00.234	Overlay OEM oil cart	1
43	40.03.330P	Cable grommet Ø16	1
44	40.03.331P	Cable grommet Ø10	1

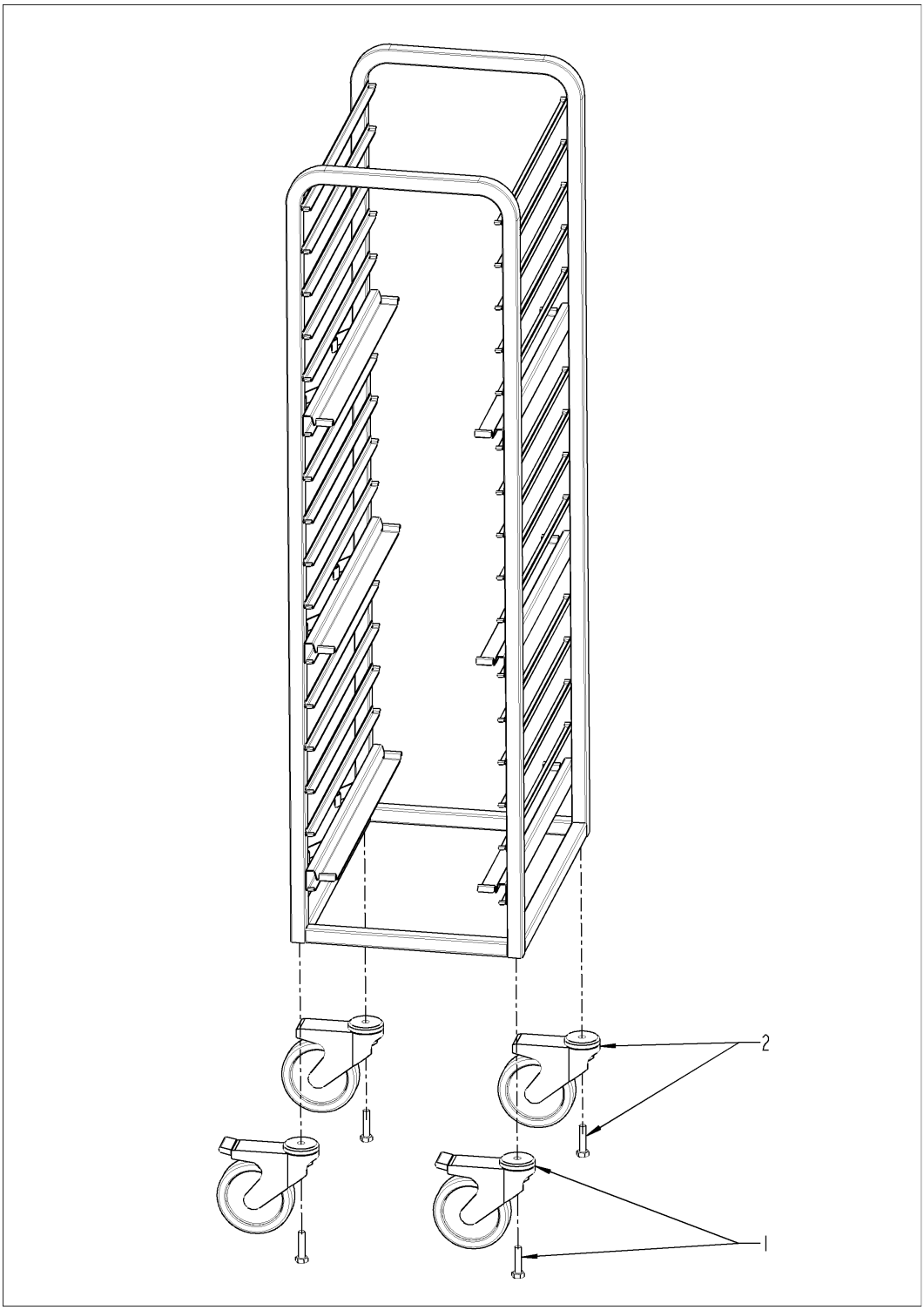
Pos. 8 VarioMobil



Pos. 8 VarioMobil

Pos.	Part no.	Description	Qty.
1	87.01.840S	Lifting roller with axle	1
2	10.00.280P	Screw HM 8x12 A2	2
3	60.70.131P	Roller 25/6.5 HM5 stainless steel	8
4	40.00.631S	Gas spring 350N	1
5	60.71.142P	Cylinder axis	2
6	10.01.538P	Spacer D10x6x1mm	1
7	1008.0752P	Hex screw M5x10	4
8	10.00.178P	Washer M5	2
9	1308.0162P	Washer A8,4	2
10	60.74.681P	Castor with brake ø125mm	2
11	60.74.680P	Castor without brake ø125mm	2

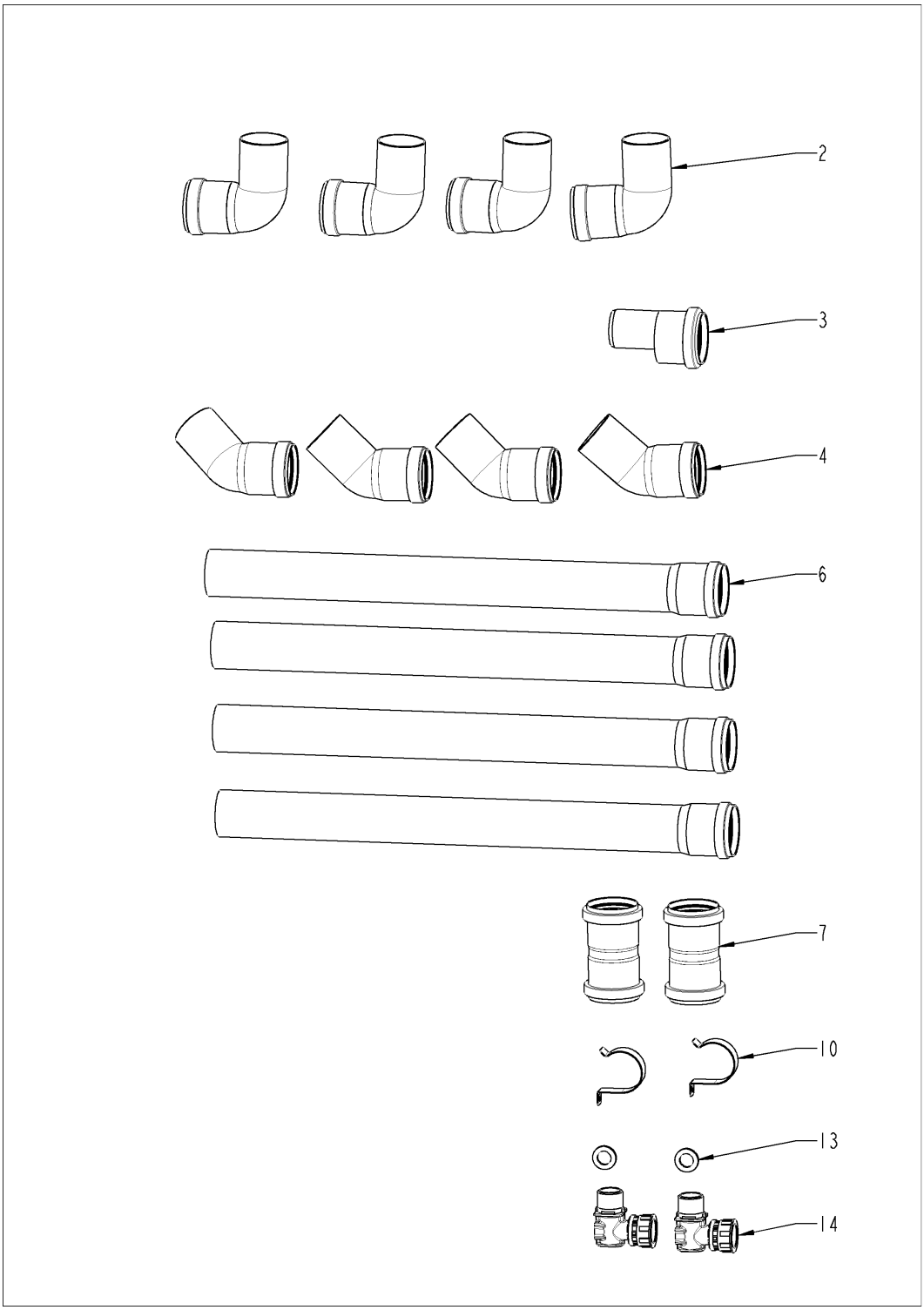
Pos. 9 Basket cart



Pos. 9 Basket cart

Pos.	Part no.	Description	Qty.
1	60.71.146	Castor with brake ø125mm, screw M12	2
2	60.71.147	Castor without brake ø125mm, screw M12	2

Pos. 10 Waste water connection kit



Pos. 10 Waste water connection kit

Pos.	Part no.	Description	Qty.
2	54.00.560P	Elbow-pipe PP DN50 87°	4
3	50.00.680P	Bushing PP D50/D40	1
4	2070.0047P	HT drain elbow 50mm, 45°	4
6	50.00.677P	PP-Pipe DN50 x 500mm	4
7	50.00.679P	Sliding sleeve DN50	2
10	60.76.474P	Securing device for discharge pipe on underframe	2
13	5110.1024P	Gasket for G3/4" threaded joint	1
14	50.00.071S	Water distribution hor. w/o roll guide con.	1

Pos. 30 Repair and retrofit kit

Pos. 30 Repair and retrofit kit

Pos.	Part no.	Description	Qty.
1	87.01.814S	Kit connection to energy optimiser	1
2	87.01.792S	Retrofit kit interface Ethernet	1
3	87.01.821S	Potential free contact adapter kit	1
4	87.01.833S	Hand shower removal kit	1
5	87.01.848S	Retrofit kit lockable control panel RATIONAL	1
6	87.01.820S	Differential Switch-Adapter-Kit	1
7	87.01.901S	Retrofit kit hot water option	1
8	87.01.987S	Retrofit kit 4 way relay L, XL with SSR support	1
10	87.01.783S	Repair kit for technical box thread	1
11	87.01.822S	Control panel fixing repair kit	1
12	87.01.875S	Speaker support repair kit with 8W loudspeaker	1
13	87.01.876S	CPU fan retro fit kit	1
16	60.77.383P	Control box shutter	1
19	87.01.959S	Rear cover with steam guide	1
21	12.00.516	Turning lock f. lower part of pedestal	4