# Service part catalogue

## iVario® ab 03/2020 Pro XL (311) - 59 dm², 150 L
## 31

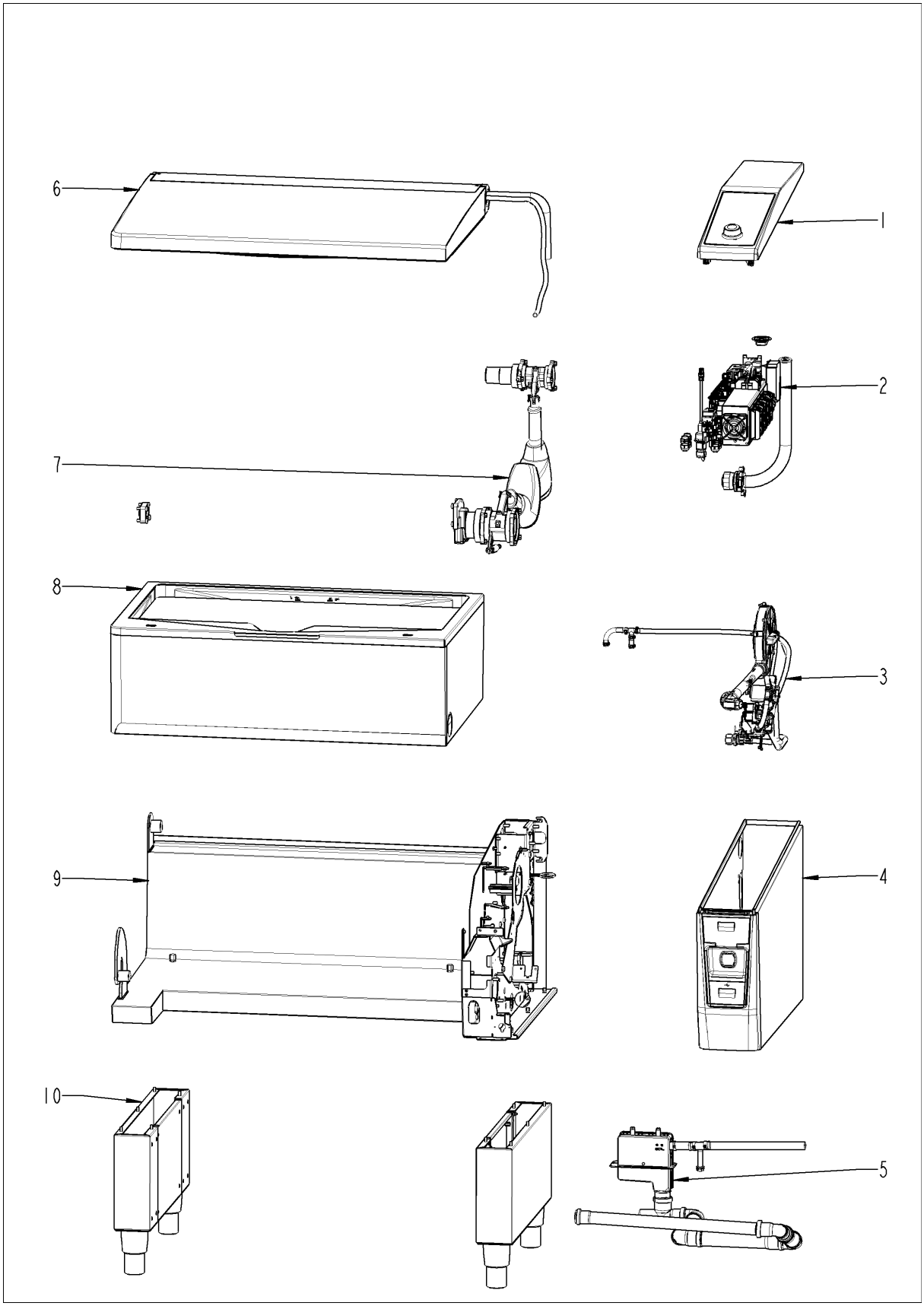
**E31VK2110**



8.12.2021 r.
3NAC400 V 50/60Hz

Kat-RTS_210315
©Copyright by RATIONAL Technical Service
All Rights reserved

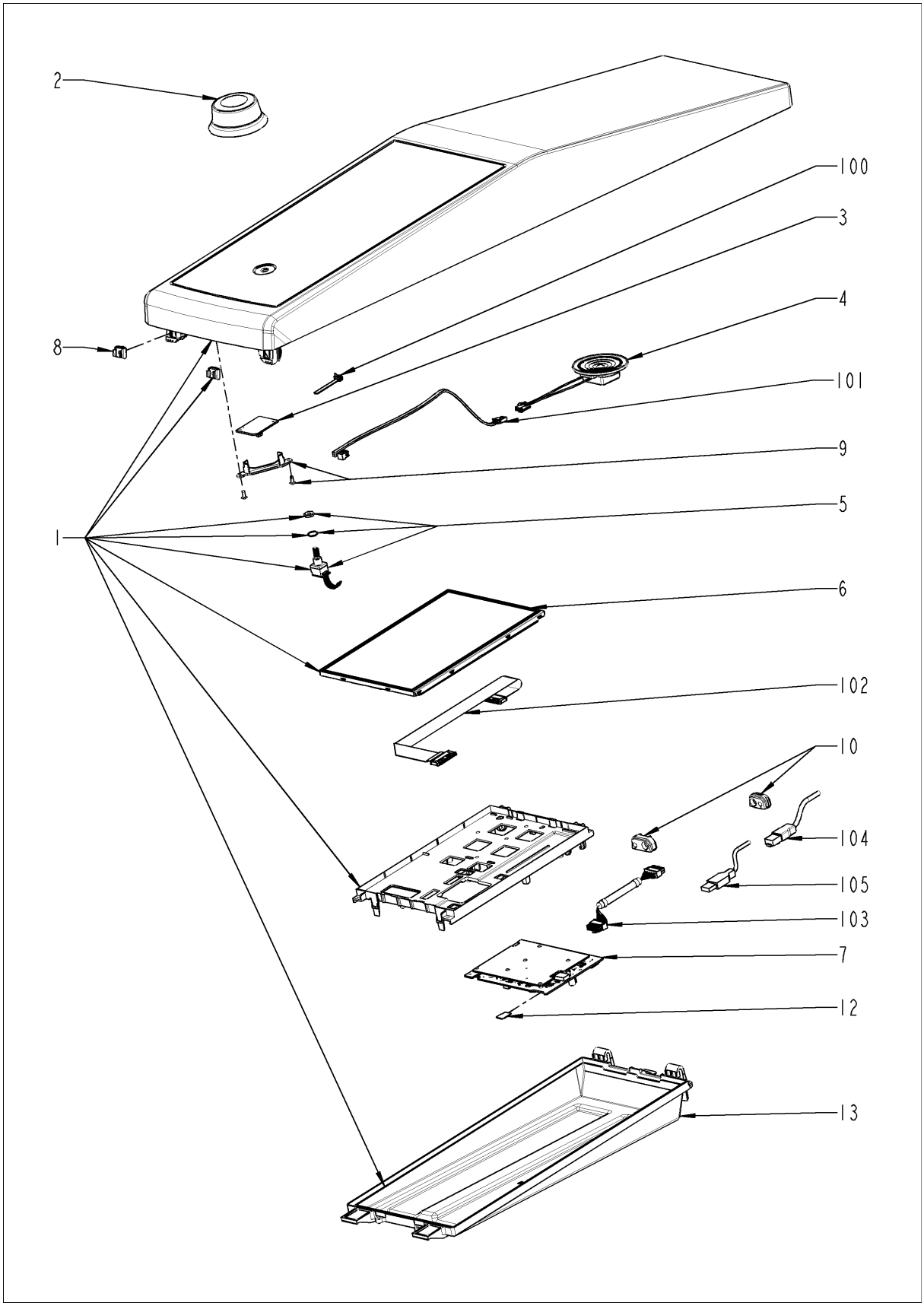
# Overview



# Overview


| Pos. | Assembly | Page |
|---|---|---|
| 1 | Control panel | 4 |
| 2 | Electrical installation | 6 |
| 3 | Water distribution | 8 |
| 4 | Console | 10 |
| 5 | Water drain | 12 |
| 6 | Lid | 14 |
| 7 | Kinematic | 16 |
| 8 | Pan | 18 |
| 9 | Base structure | 20 |
| 10 | Underframe | 22 |
| 20 | Accessories | 24 |
| 30 | Repair and retrofit kit | 44 |

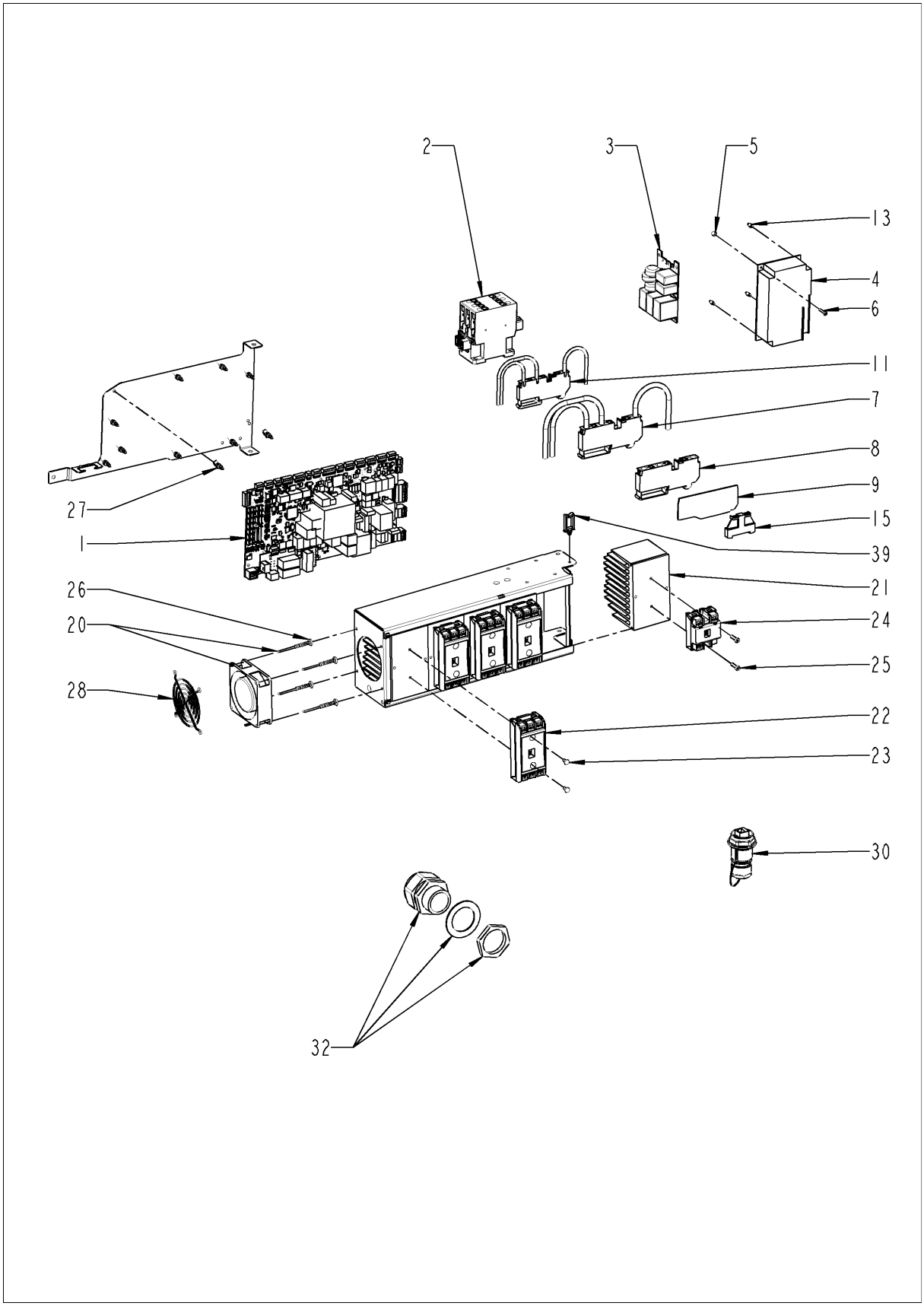
# Control panel



# 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 | 40.06.728P | Loudspeaker K 64 WPTR | 1 |
| 5 | 40.00.404P | 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 |

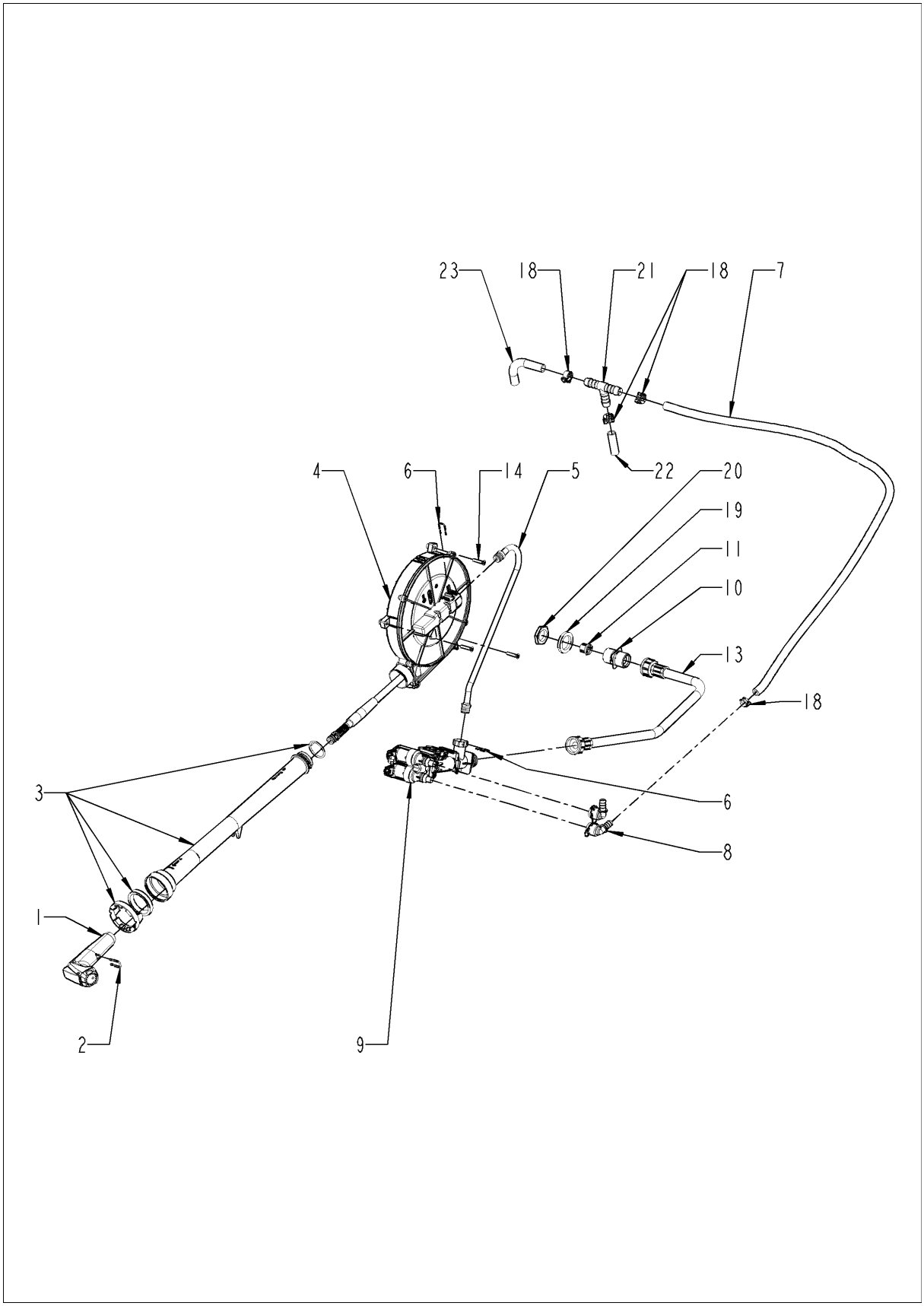
# Electrical installation



# 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 | 10.01.907P | Spacer Ø int = 3,2mm, H = 6mm | 1 |
| 6 | 10.00.144P | Socket cap screw M3x16mm | 1 |
| 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 |
| 13 | 10.01.906P | Printed circuit board holder, clip-on H=6mm | 3 |
| 15 | 4001.1203P | End plate for mounting rail | 1 |
| 20 | 40.06.806S | Cooling fan | 1 |
| 21 | 40.06.428P | Heat sink 1 SSR | 5 |
| 22 | 40.05.670P | Solid state relais | 4 |
| 23 | 10.02.263P | Raised countersunk head screw Torx M4x10 T20 | 8 |
| 24 | 40.05.840P | 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 |
| 32 | 40.00.701S | Screwed cable gland polyamid PG40 | 1 |
| 39 | 10.02.376P | Cable tie 160mm with fir base | 4 |
| 100 | 40.06.723P | Control harness | 1 |

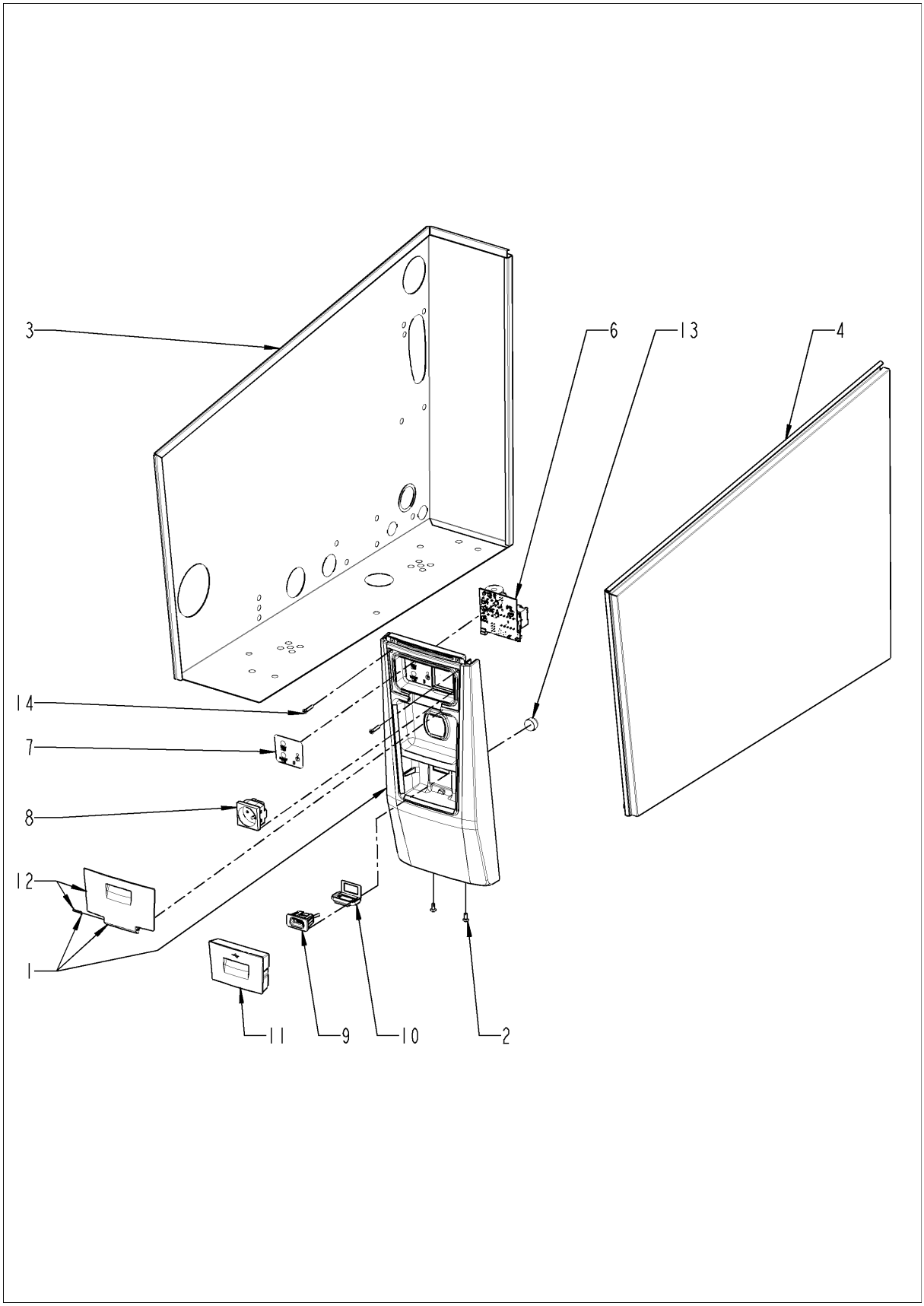
# Water distribution



# 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 | Plug-in spring f. hand shower roll guide | 2 |
| 8 | 52.00.017P | Angle plug PS3 6-6-90° | 1 |
| 9 | 50.02.067P | 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 | 1 |
| 19 | 50.02.324P | Gasket for water supply coupling 38x28 | 1 |
| 20 | 50.02.325P | Fixing nut 3/4" | 1 |
| 100 | 40.07.208P | Flowmeter cable | 1 |

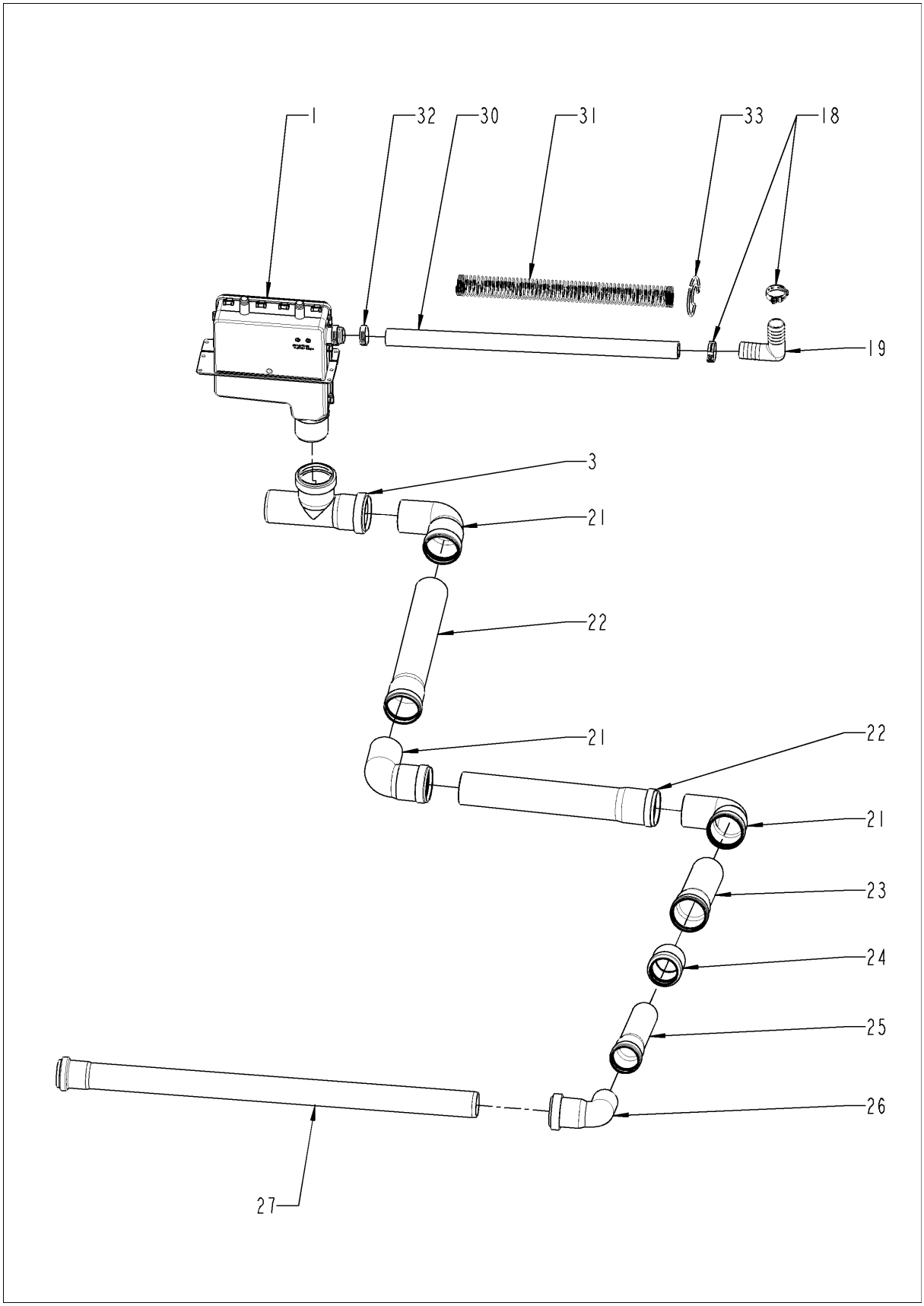
# Console



# 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 |

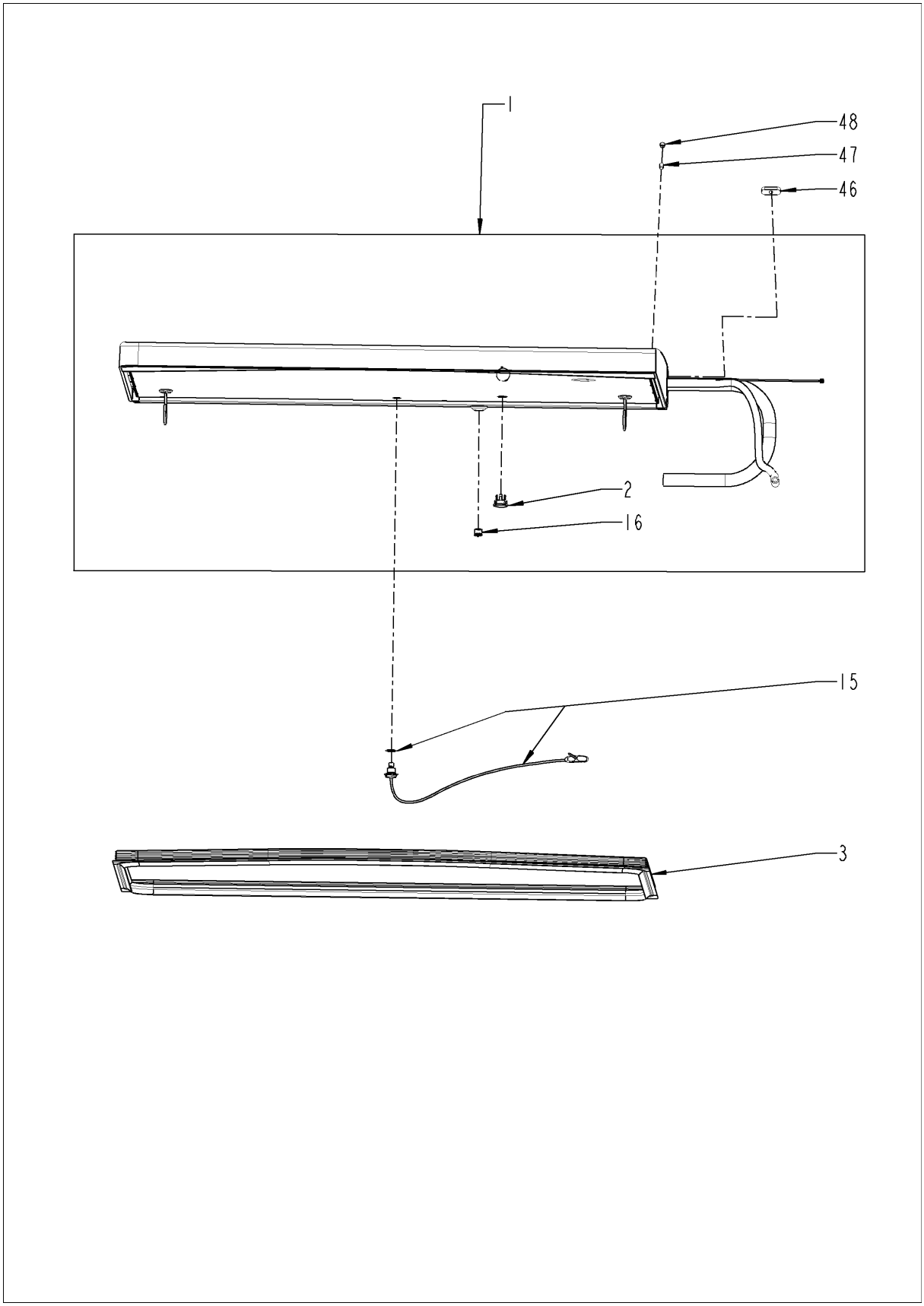
# Water drain



# Water drain

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 54.02.069P | Control chamber | 1 |
| 3 | 2070.0048P | HT drain T-fitting 50mm | 1 |
| 18 | 10.02.240P | Hose clamp clic R96-290 | 2 |
| 19 | 54.02.072P | Elbow fitting Ø20 | 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 hose | 1 |
| 30 | 24.04.939P | Silicone hose diameter 20/26mm | .48 |
| 31 | 50.02.072P | Holding spring | 1 |
| 32 | 10.02.240P | Hose clamp clic R96-290 | 1 |
| 33 | 24.05.622P | Spring stop | 1 |

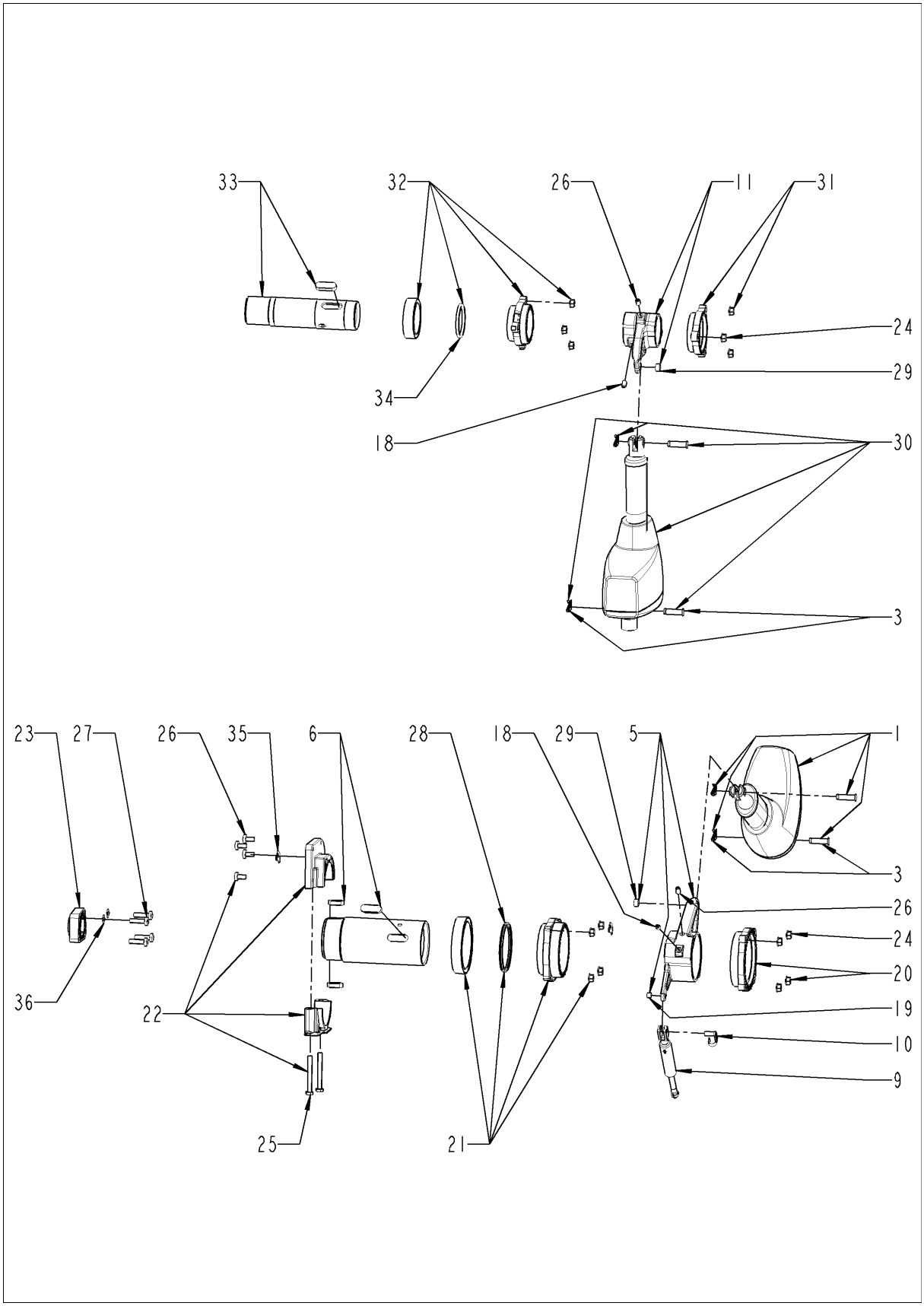
# Lid



# Lid

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 24.04.298P | Lid | 1 |
| 2 | 24.04.054P | Cover for pressure connection | 1 |
| 3 | 24.04.954P | Lid gasket | 1 |
| 15 | 40.07.165S | Meat probe sensor | 1 |
| 16 | 50.02.248S | Aerator with service key | 1 |
| 45 | 24.04.939P | Silicone hose diameter 20/26mm | .48 |
| 46 | 10.01.849P | Parallel key 14x9x40 | 1 |
| 47 | 10.01.833P | Hexagon socket set screws with flat point M8x14 | 1 |
| 48 | 24.05.037P | Stopper D9 | 1 |

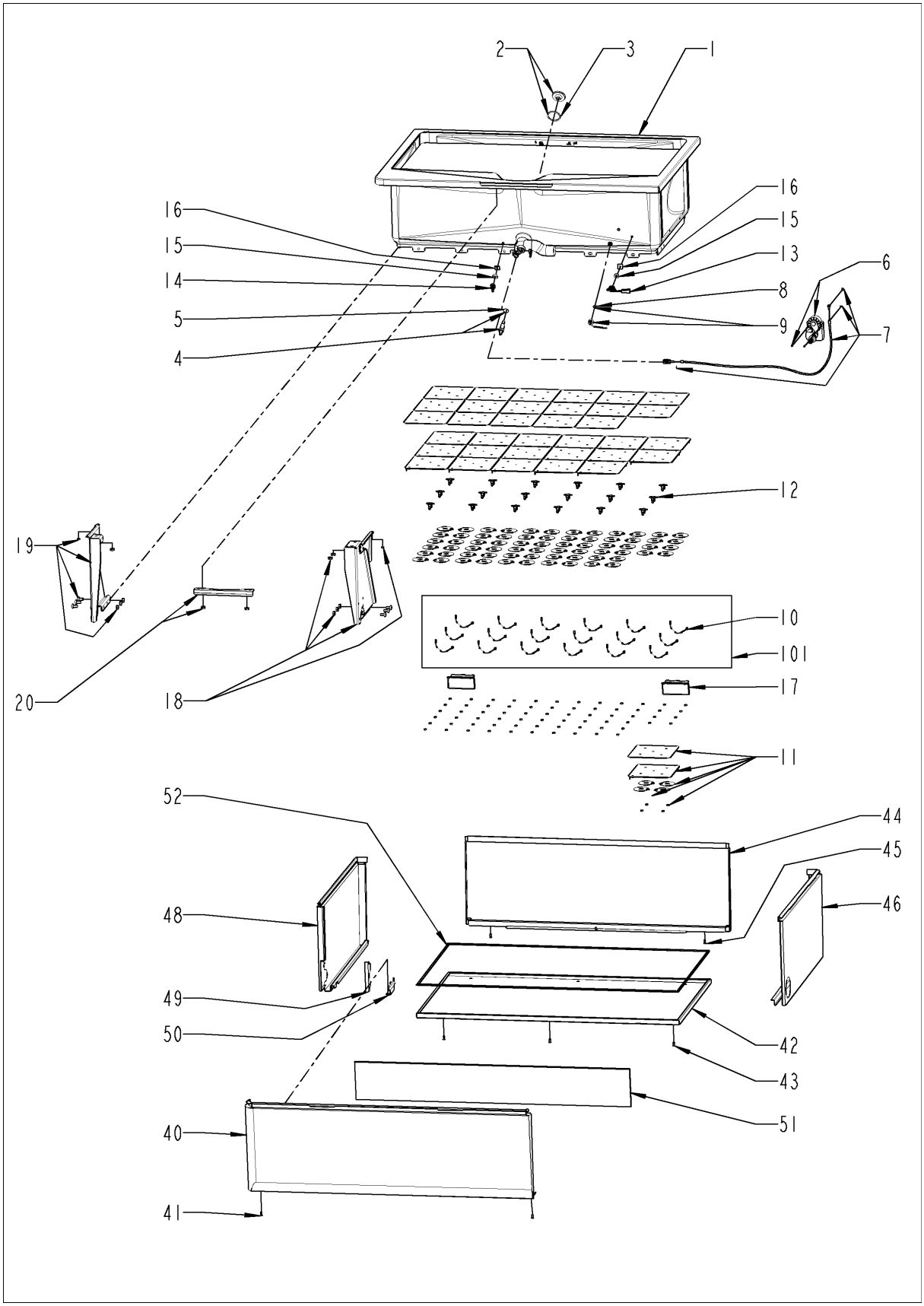
# Kinematic


33
32
26
11
31
24
29
34
18
30
3
23
27
26
35
6
28
18
29
5
1
3
26
24
20
19
10
9
36
22
25
21

# 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 | 20.03.323S | Lift arm for pan | 1 |
| 6 | 20.03.190S | Pan shaft | 1 |
| 9 | 20.03.743P | Gas spring 900N | 1 |
| 10 | 10.02.168P | Fixture security for gas spring | 1 |
| 11 | 24.04.358S | 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 | 6 |
| 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 |
| 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 |
| 36 | 1308.0160P | Washer M8 A2 | 2 |

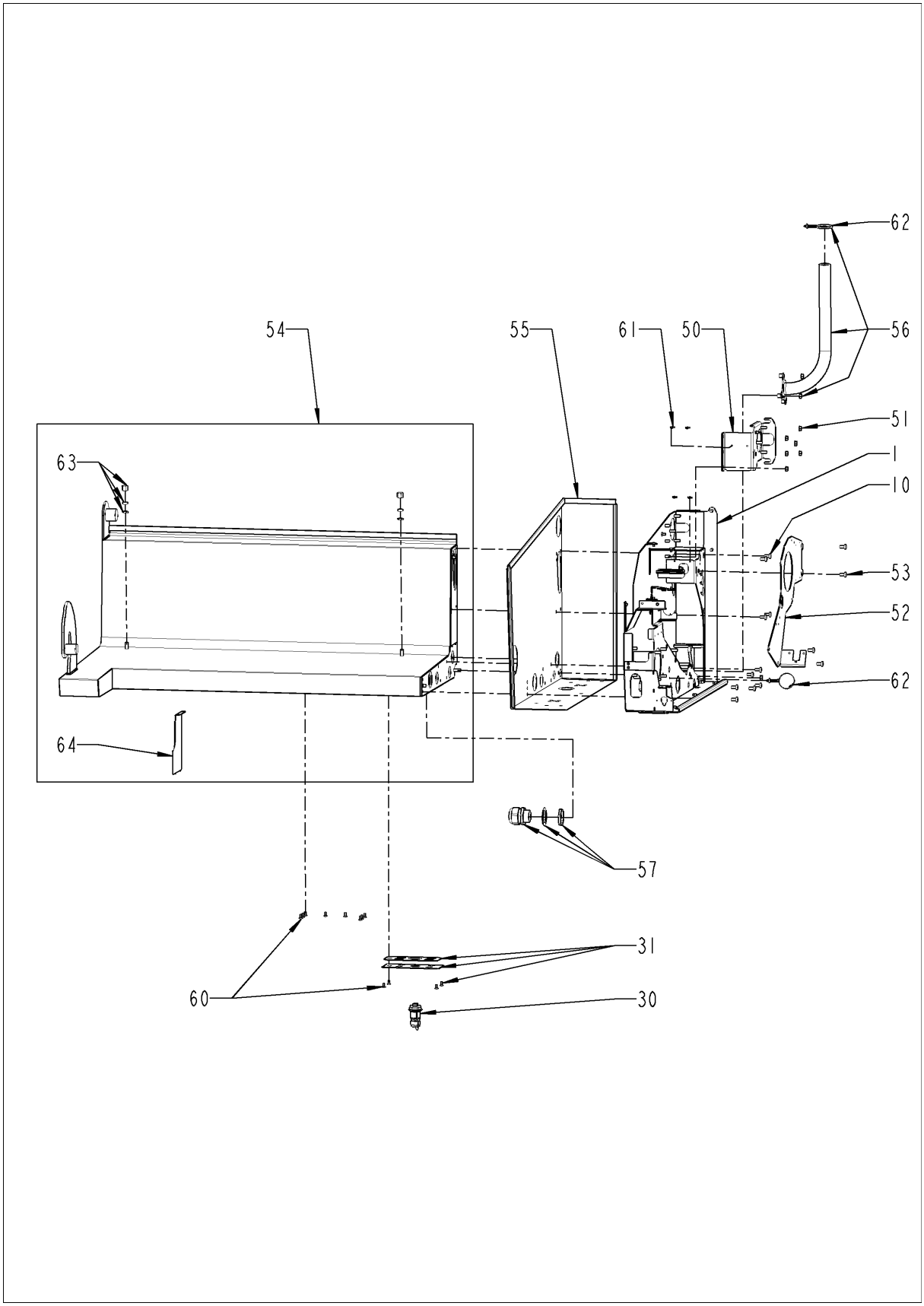
# Pan


2
3
1
16
15
14
5
4
16
15
13
6
8
9
7
12
19
20
18
10
101
17
11
52
44
45
48
46
49
50
42
43
51
40
41

# Pan

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 87.01.606S | Kit pan without 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 |
| 6 | 40.04.349S | Actuation for pan valve | 1 |
| 7 | 20.01.598P | Pan valve cable | 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 |
| 18 | 20.03.669S | Pan flange right | 1 |
| 19 | 20.03.670S | Pan flange left | 1 |
| 20 | 20.03.700S | Pan spout reinforcement | 1 |
| 40 | 16.03.711P | Front panel for pan | 1 |
| 41 | 10.01.808P | Hex socket countersunk head screw M5x16 | 2 |
| 42 | 16.03.489P | Lower panel for pan | 1 |
| 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 |
| 49 | 16.03.706P | Sealing device for left panel | 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 |

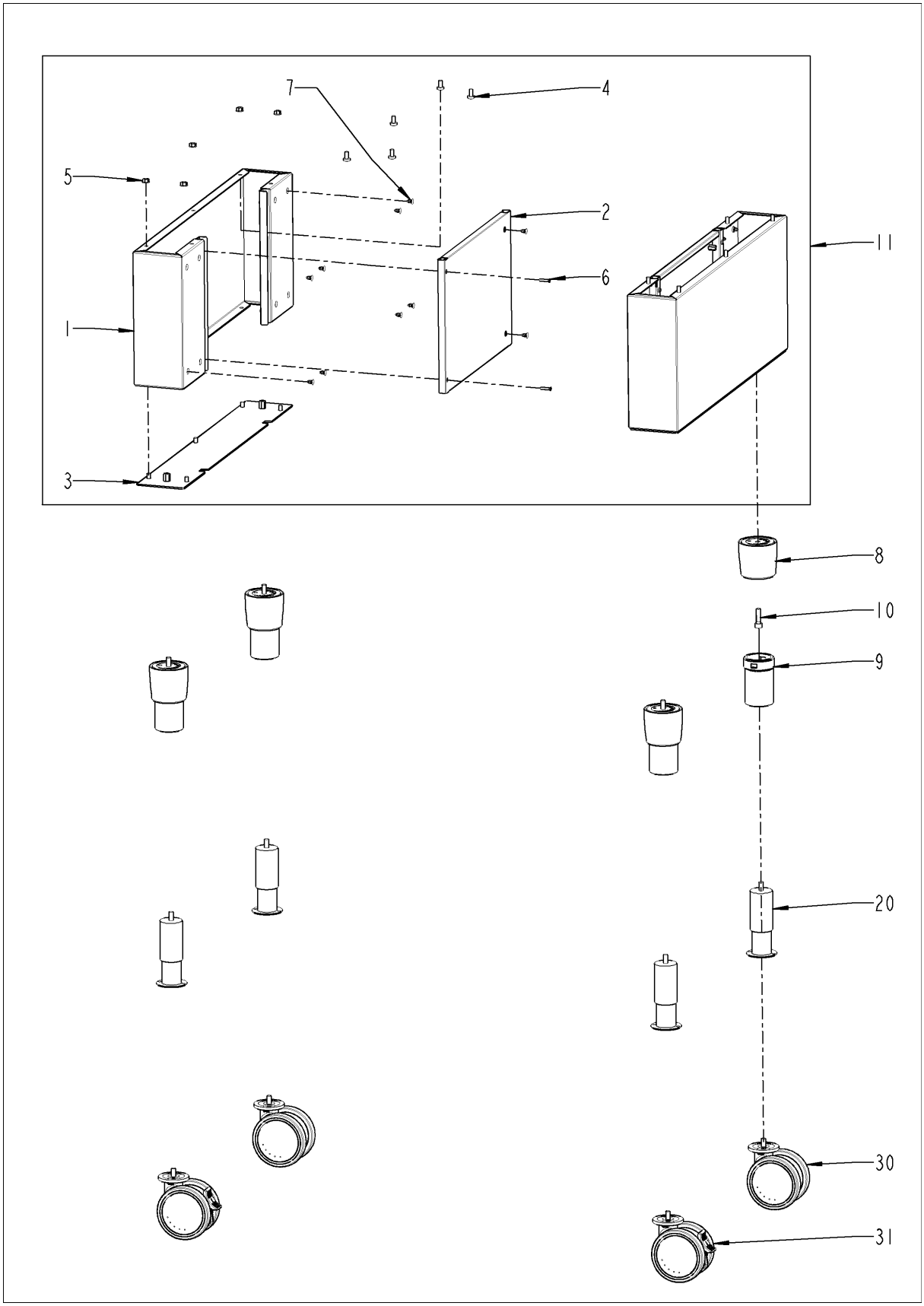
# Base structure



# Base structure

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 12.02.937P | Chassis right | 1 |
| 10 | 10.01.616P | Pan head screw Torx T40 M8x16 | 10 |
| 31 | 12.02.440S | Cable gland mounting plate | 1 |
| 50 | 12.02.939P | Removable part of the right frame | 1 |
| 51 | 10.01.851P | Collar nut M8 locking teeh | 5 |
| 52 | 12.02.531P | 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 | 12.02.971S | 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 |

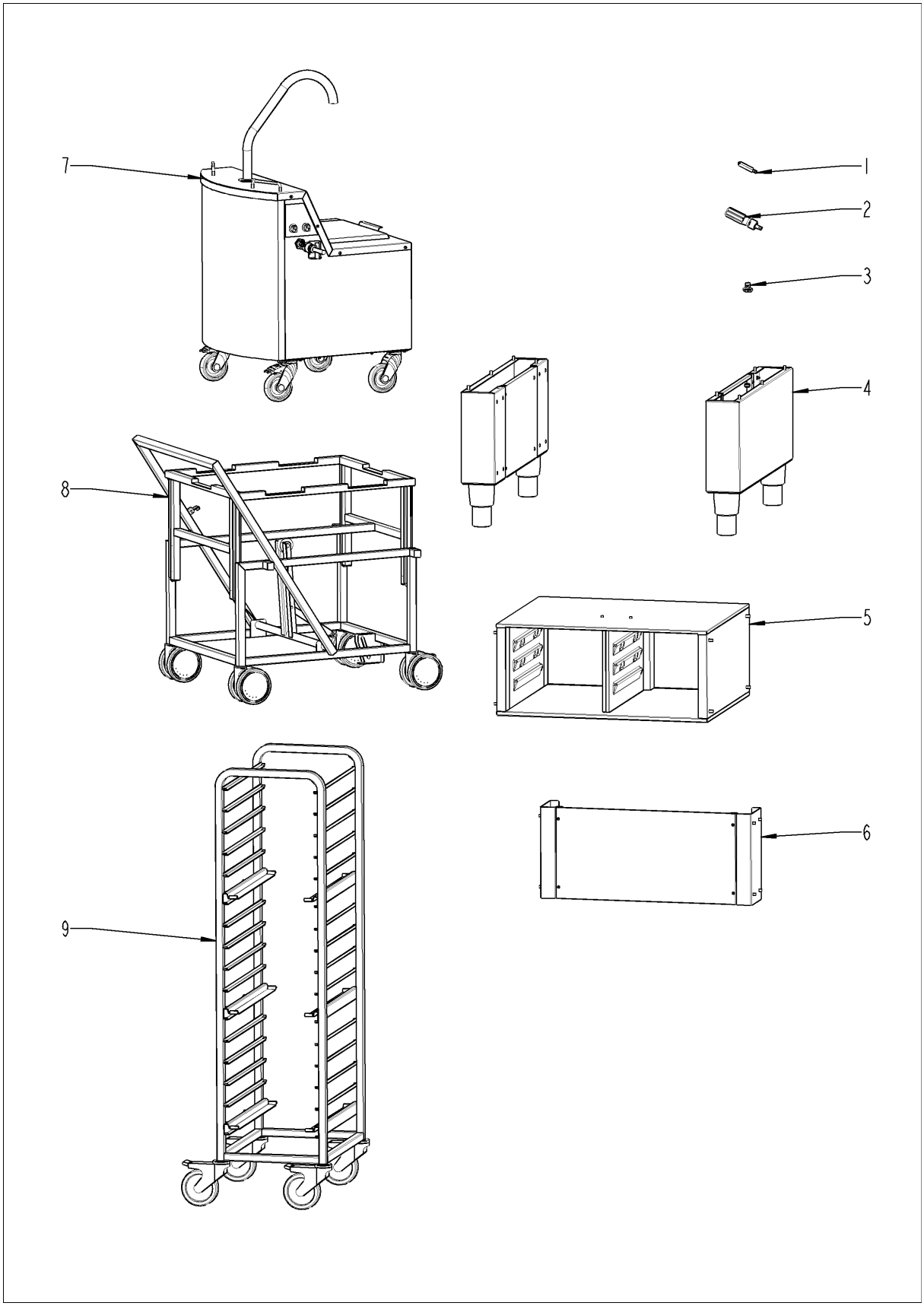
# Underframe



# 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 | 20 |
| 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 |

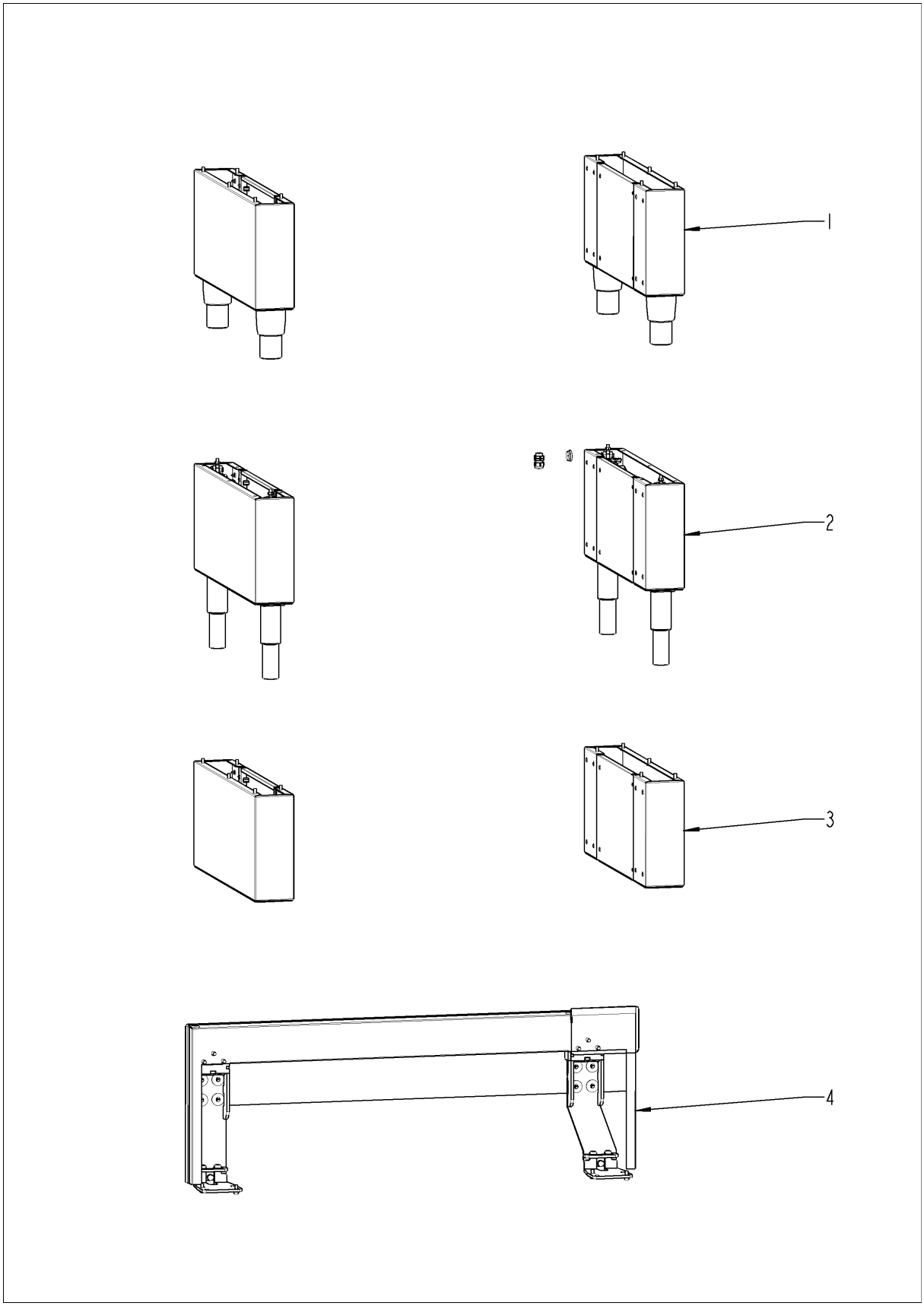
# Accessories



# 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 |

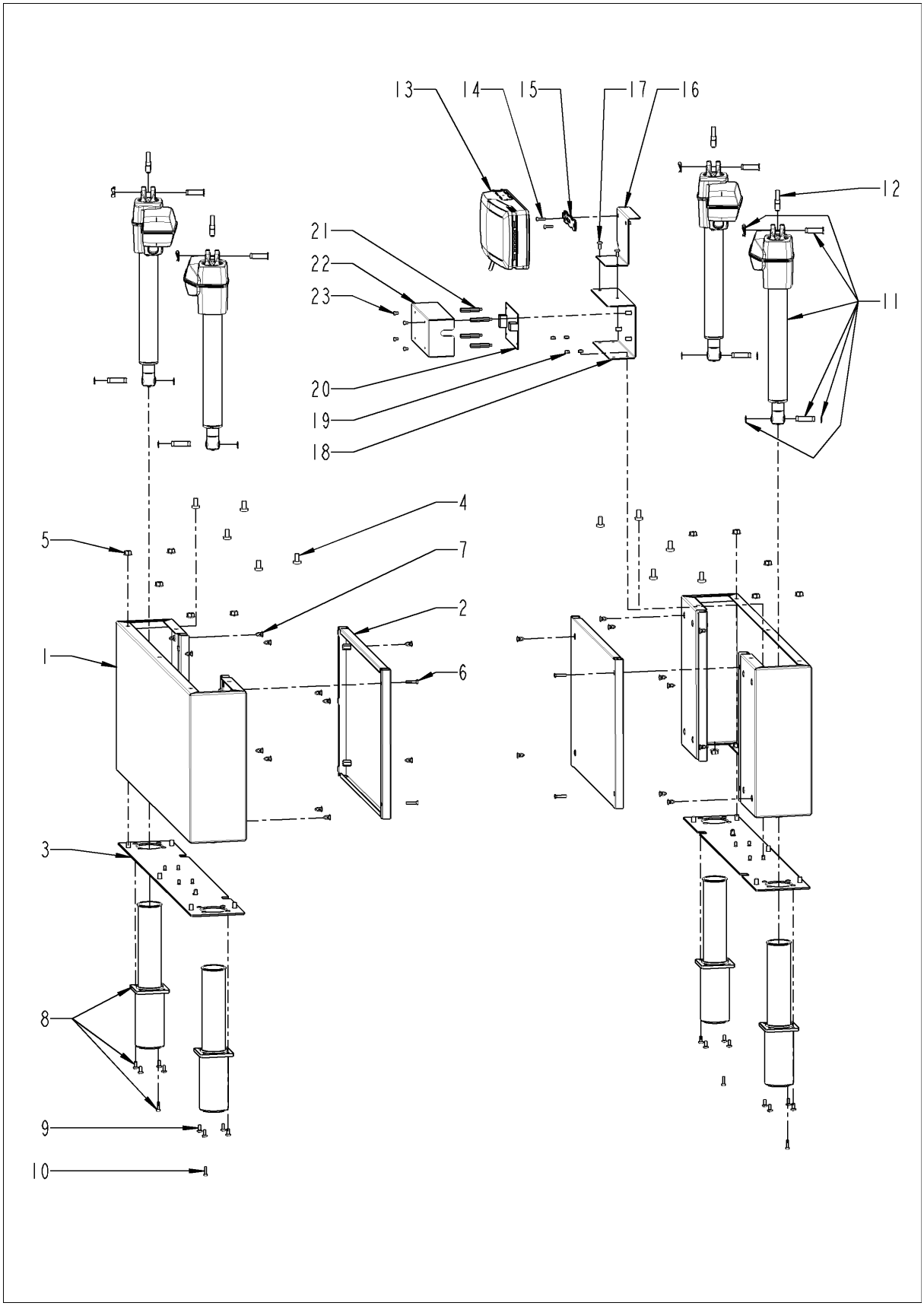
# Installation variants



# Installation variants

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 2 | | Stand with electric height adjustment | 1 |
| 4 | | Wall attachment kit | 1 |

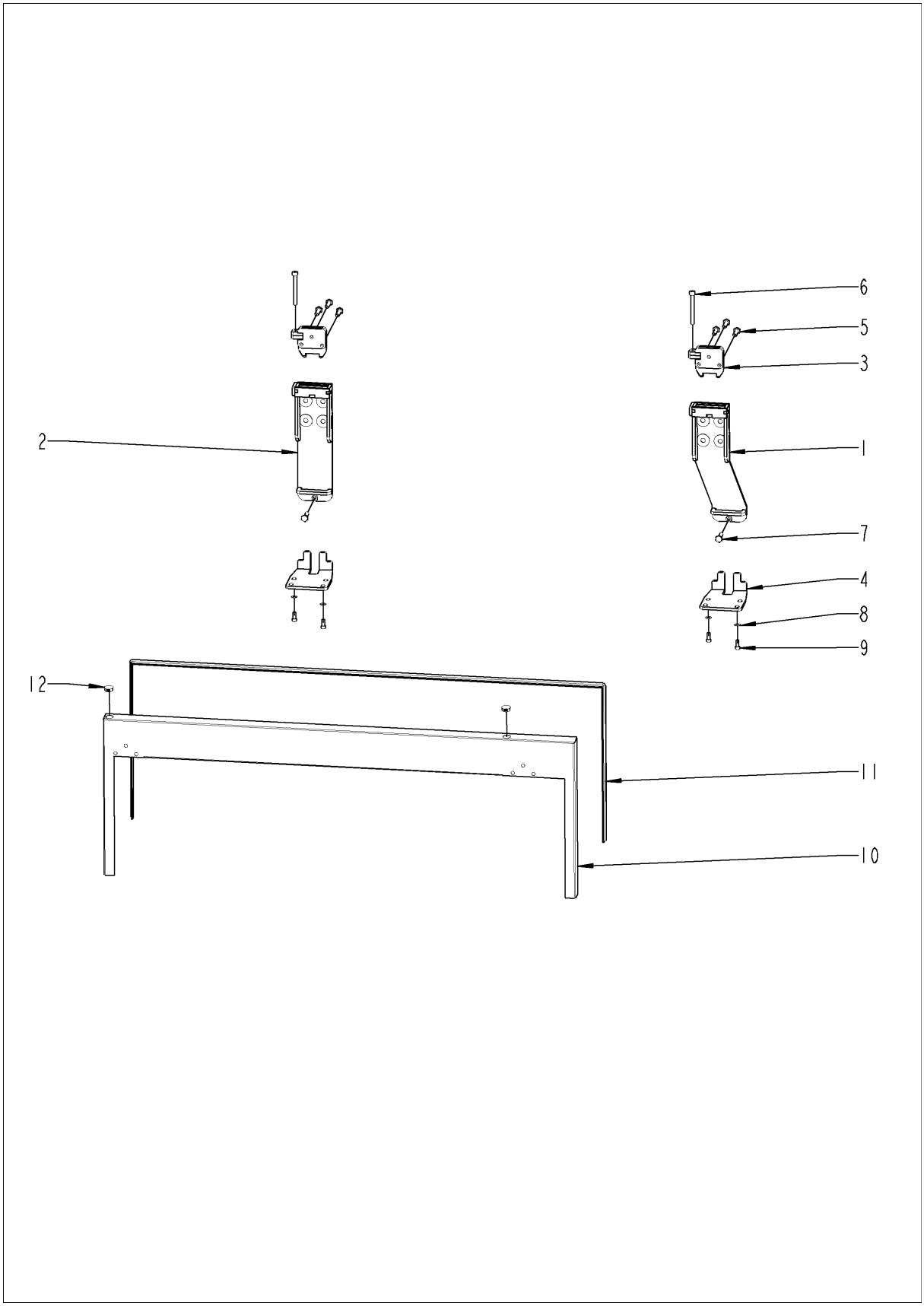
# Stand with electric height adjustment



# 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 | 60.74.669P | 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 | 10 |
| 6 | 10.01.669P | Slot counter head secur screw M5X20 Phillips | 4 |
| 7 | 10.01.928P | Plug 6.6 for threaded hole M8 | 20 |
| 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 | 1 |
| 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 | 42.00.344P | 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 |
| 30 | 54.02.056P | Flexible drain pipe DN50 | 1 |
| 100 | 40.07.175P | Power + bus cable for height-adjustable substructure | 1 |
| 102 | 40.06.762P | Short power supply cable height adjustable cylinder | 2 |
| 103 | 40.06.763P | Cylinder connection cable to CO61 module | 2 |
| 104 | 40.06.765P | Connection cable CO61 - RS232 converter | 1 |

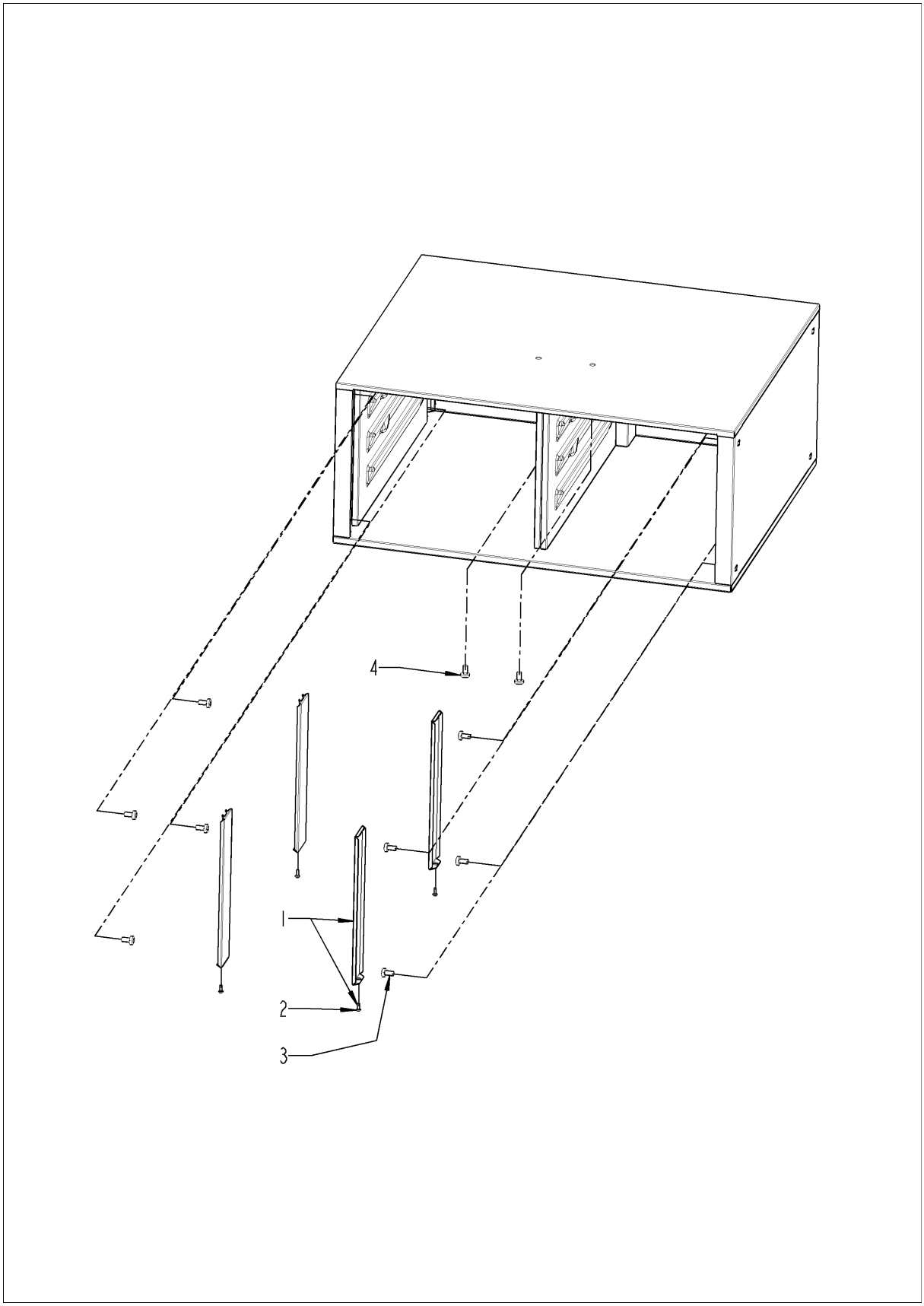
# Wall attachment kit



# 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 | 60.75.984P | Wall mounting panelling gasket | 1 |
| 12 | 10.02.190P | Blanking plug for Ø22.2mm | 2 |

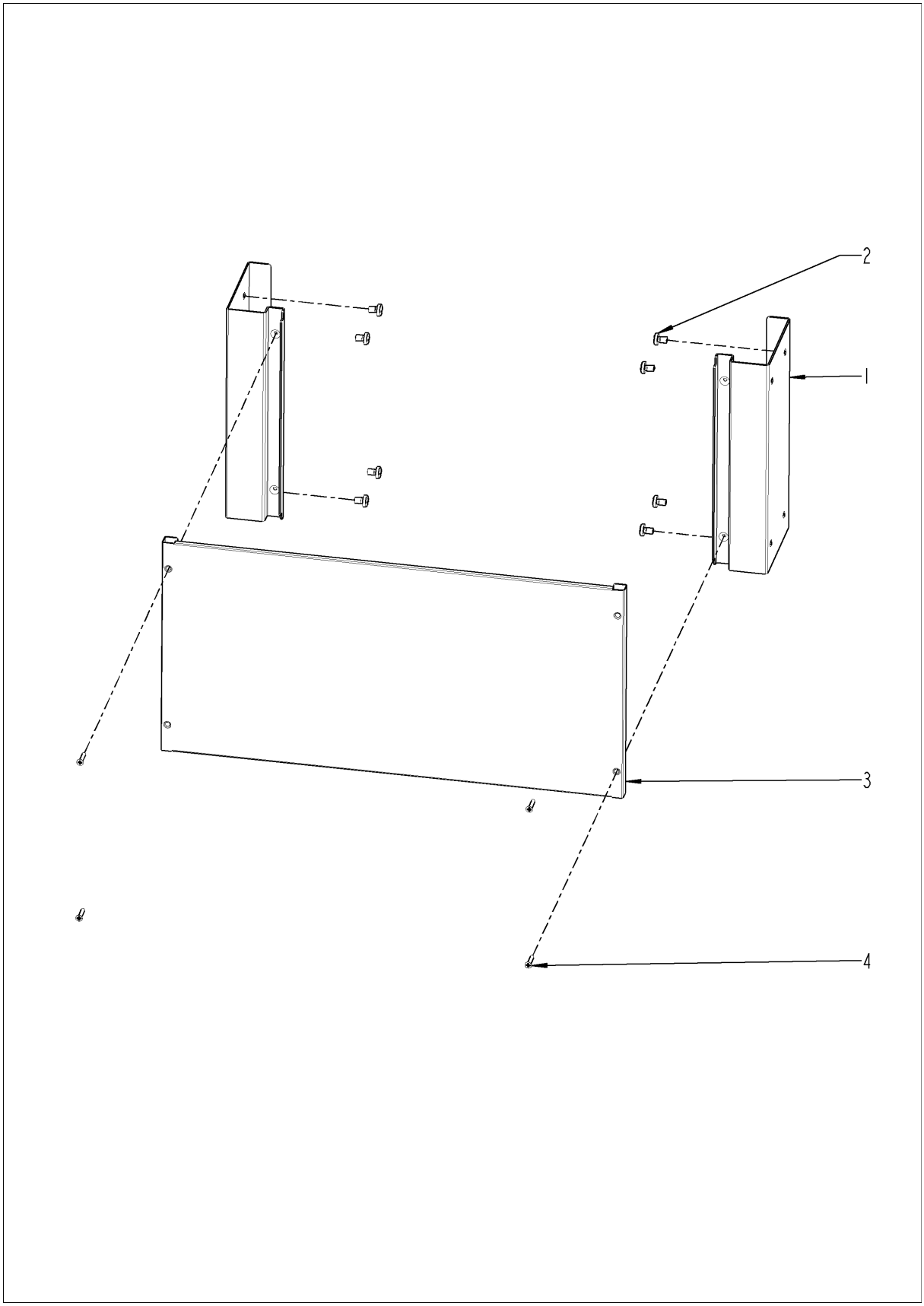
# Storage space for substructure



# 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 |

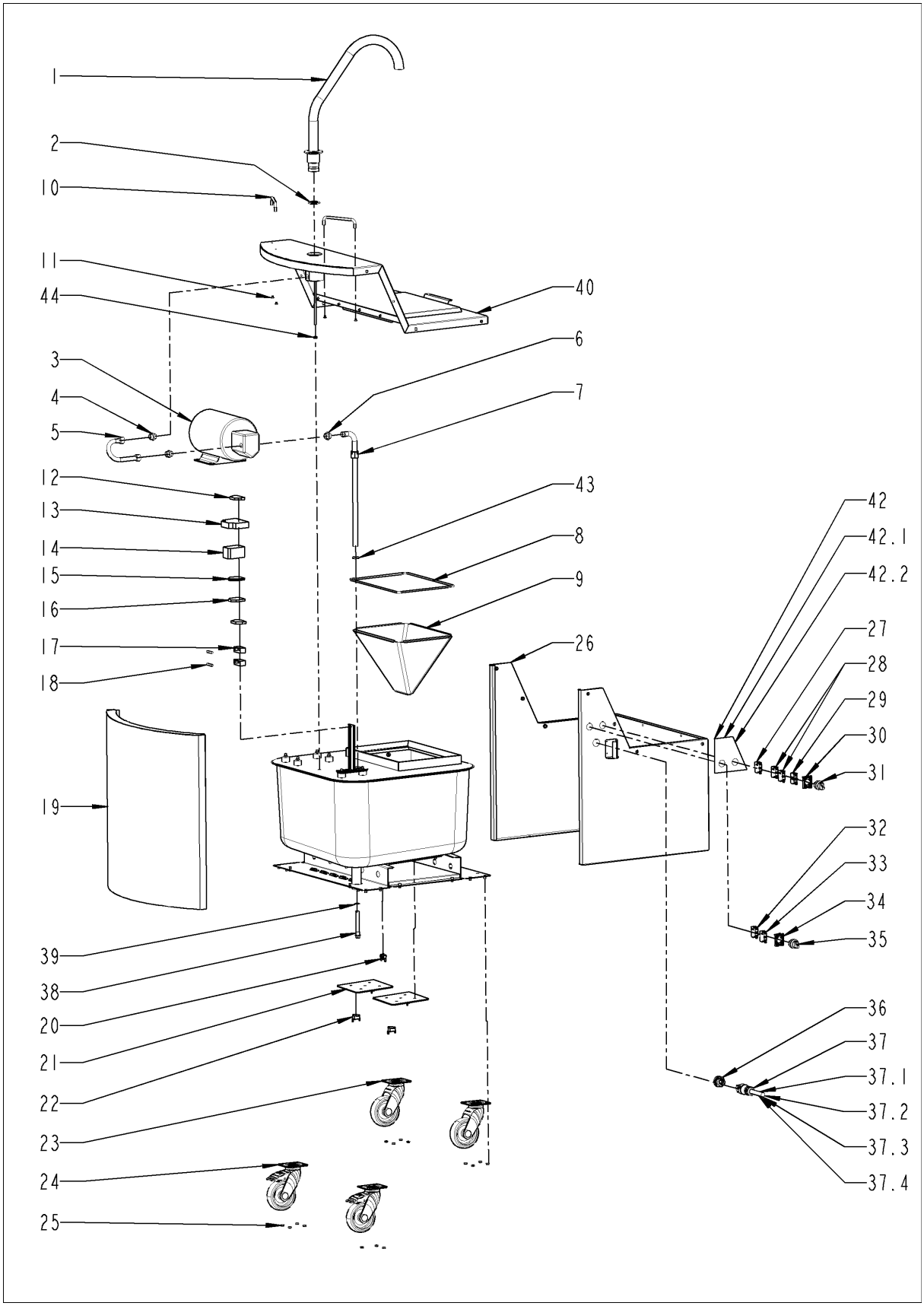
# Panelling for substructure



# 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 |

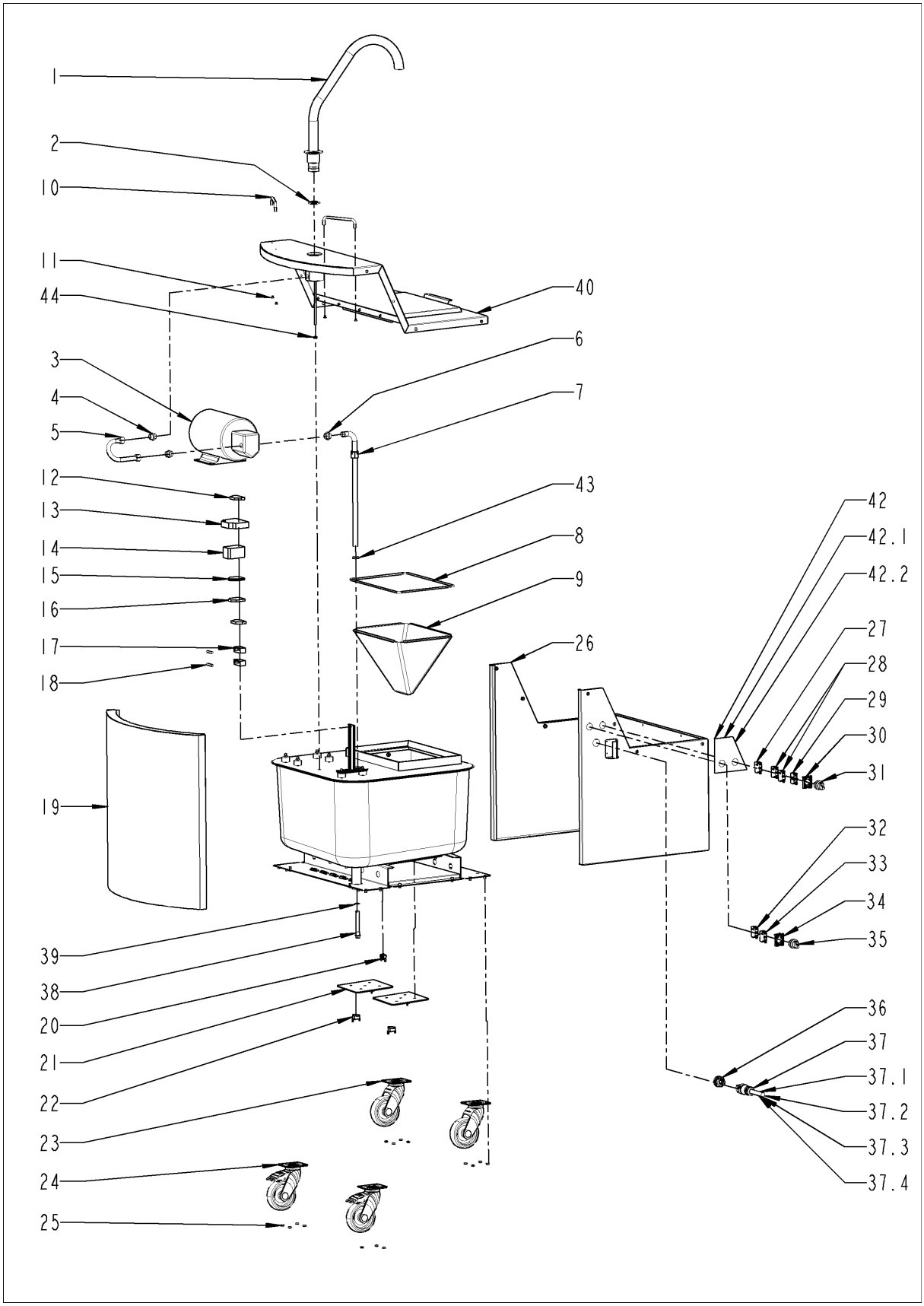
# Oil cart


1
2
10
11
44
40
6
3
4
7
5
12
43
13
42
42.1
14
8
42.2
15
9
27
16
26
28
17
29
18
30
31
19
32
33
34
35
39
38
36
20
37
21
37.1
22
37.2
23
37.3
24
37.4
25

# 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 |
| 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 |

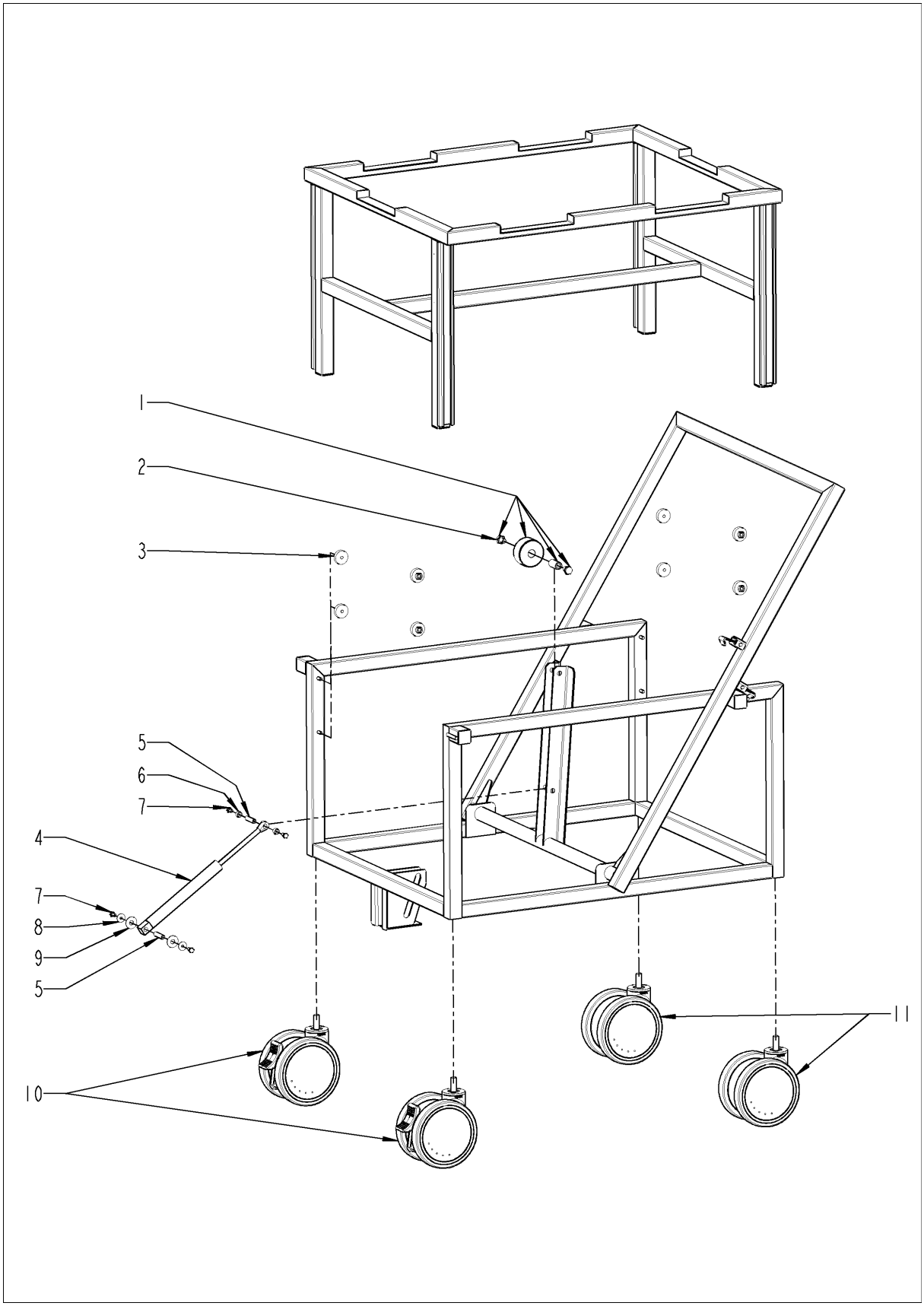
# Oil cart


1
2
10
11
44
40
6
3
4
7
5
12
43
13
42
42.1
14
8
42.2
15
9
27
16
26
28
17
29
18
30
31
19
32
33
34
35
39
38
36
20
37
21
37.1
22
37.2
23
37.3
24
37.4
25

# Oil cart

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 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 |

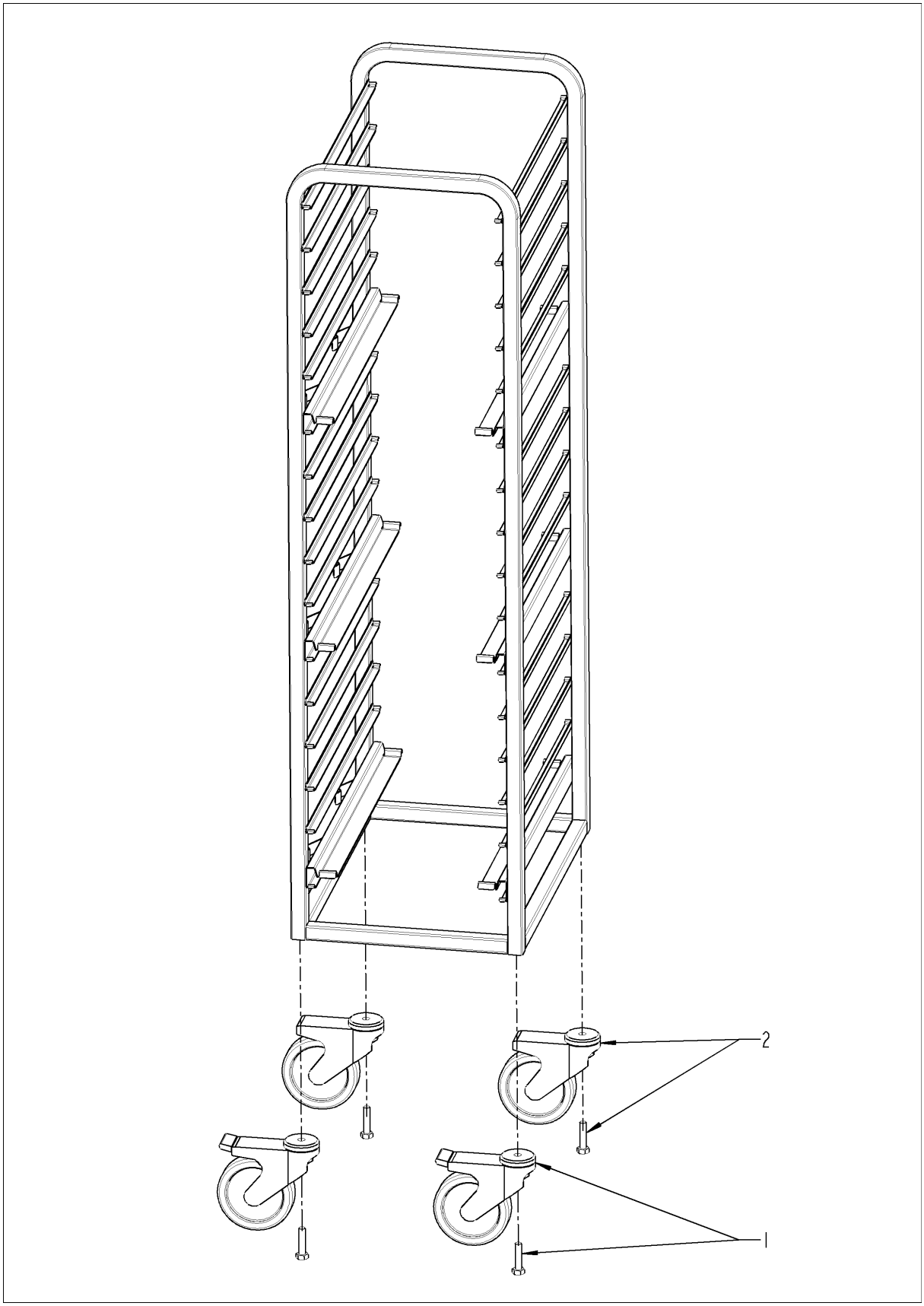
# VarioMobil



# 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 |

# Basket cart



# 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 |

# Repair and retrofit kit

# 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 | 87.01.818S | Differential Switch-Adapter-Kit "Australia" | 1 |
| 6 | 87.01.820S | Differential Switch-Adapter-Kit | 1 |
| 7 | 87.01.901S | Retrofit kit hot water option | 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 | Loudspeaker kit SL70 8W | 1 |
| 13 | 87.01.876S | CPU fan retro fit kit | 1 |
| 15 | 87.01.907S | Hose repair kit D10mm | 1 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 40.07.421S | 80mm fan protection grill with mounting set | 7 |
| 40.04.349S | Actuation for pan valve | 19 |
| 82.00.257 | Adaptator for contact element | 37 |
| 40.07.635P | Adapter harness for I/O board A13 | 7 |
| 12.03.051P | Adjustable stainless foot | 23 |
| 50.02.319P | Aerator service key | 25 |
| 50.02.248S | Aerator with service key | 15 |
| 1004.0665F | Allen screw M4x6 | 37 |
| 10.01.241P | Allen screw M8x20 | 31 |
| 10.02.084P | Allen screw M10x90 | 31 |
| 52.00.017P | Angle plug PS3 6-6-90° | 9 |
| 24.04.358S | Arm raising lid | 17 |
| 40.02.641P | Auxilliary contact B&J HN10 N/O | 7 |
| 16.03.830P | Back panel for pan | 19 |
| 20.03.331S | Bearing for pan | 17 |
| 20.02.892P | Bearing left for pan | 17 |
| 10.02.190P | Blanking plug for Ø22.2mm | 31 |
| 82.00.260 | Blue Led indicator | 37 |
| 60.74.669P | Bottom plate for a height-adjustable substructure | 29 |
| 40.06.103P | Bus cable 0,7m | 5 |
| 40.07.636P | Bus cable for A13 I/O board | 7 |
| 50.00.680P | Bushing PP D50/D40 | 13 |
| 40.06.760P | Cable control pcb - capacitive switch | 5 |
| 40.06.569P | Cable CPU - TFT | 5 |
| 12.02.440S | Cable gland mounting plate | 21 |
| 40.03.331P | Cable grommet Ø10 | 39 |
| 40.03.330P | Cable grommet Ø16 | 39 |
| 10.02.376P | Cable tie 160mm with fir base | 7 |
| 10.01.862P | Cage nut M5 for 1.7 up to 2.5mm | 5 |
| 82.00.231 | Castor with brake | 37 |
| 60.74.681P | Castor with brake ø125mm | 23, 41 |
| 60.71.146 | Castor with brake ø125mm, screw M12 | 43 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 82.00.230 | Castor without brake | 37 |
| 60.74.680P | Castor without brake ø125mm | 23, 41 |
| 60.71.147 | Castor without brake ø125mm, screw M12 | 43 |
| 12.02.449P | Chassis left 211/311 | 21 |
| 16.03.769S | Chassis rear cover | 21 |
| 12.02.937P | Chassis right | 21 |
| 50.00.156P | Clamp f. hand shower roll guide | 9 |
| 42.00.351P | CO61 module carrier | 29 |
| 10.01.851P | Collar nut M8 locking teeh | 17, 21, 23, 29 |
| 40.06.765P | Connection cable CO61 - RS232 converter | 29 |
| 87.01.616S | Connection pipe hand shower roll guide | 9 |
| 82.00.300 | Connector for socket-outlet | 39 |
| 82.00.259 | Contact NC | 37 |
| 82.00.258 | Contact NO | 37 |
| 40.02.917 | Contactor 3TG1010-2AK2 | 37 |
| 40.06.455P | Contactor K3-40B00 190R T AZ | 7 |
| 54.02.069P | Control chamber | 13 |
| 40.06.723P | Control harness | 7 |
| 87.01.822S | Control panel fixing repair kit | 45 |
| 16.03.565P | Control panel RATIONAL | 5 |
| 42.00.251P | Control pcb (w/o SD-Card) | 5 |
| 87.00.674 | Conversion kit heating element 2287W 230V | 19 |
| 42.00.344P | Converter holder part 1 | 29 |
| 42.00.375P | Converter protection cover | 29 |
| 40.06.806S | Cooling fan | 7 |
| 10.01.923P | Counter head screw M5x45 DIN965-H | 11 |
| 24.04.455S | Cover bearing | 17 |
| 24.04.054P | Cover for pressure connection | 15 |
| 24.04.418S | Cover shaft | 17 |
| 87.01.876S | CPU fan retro fit kit | 45 |
| 10.01.912P | Crosshead screw M5x12 | 11, 21, 29 |
| 10.02.025P | Crosshead screw M8x12 | 35 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 60.71.142P | Cylinder axis | 41 |
| 40.06.763P | Cylinder connection cable to CO61 module | 29 |
| 10.01.826P | Cylinder head screw torx T40 M8x30 | 17 |
| 16.03.756P | Dial f. pulse generator | 5 |
| 87.01.820S | Differential Switch-Adapter-Kit | 45 |
| 87.01.818S | Differential Switch-Adapter-Kit "Australia" | 45 |
| 42.00.287P | Display *TFT* | 5 |
| 40.06.933P | Double level earth terminal 6mm² yellow/green | 7 |
| 40.06.426P | Double level terminal block 16mm² blue | 7 |
| 60.99.244 | Drain plug gasket | 39 |
| 60.74.412 | Drain plug oil reserve | 39 |
| W24001 | Dynamometric screwdriver 4Nm | 25 |
| 40.06.626P | Earth terminal WKFN 16 D1/2/SL/35 | 7 |
| 54.02.072P | Elbow fitting Ø20 | 13 |
| 54.00.575P | Elbow-pipe PP DN40 87.5° | 13 |
| 54.00.560P | Elbow-pipe PP DN50 87° | 13 |
| 42.00.322P | Electronic noice filter | 7 |
| 40.07.121P | End flask for block APFN 16 D1/2/35 | 7 |
| 4001.1203P | End plate for mounting rail | 7 |
| 82.00.250 | End plate for mounting rail | 37 |
| 82.00.289 | External panel | 37 |
| 60.74.853P | Eye socket with threaded shank M8x20 | 29 |
| 82.00.674P | Filling pipe for 100mm extension | 37 |
| 10.02.082P | Fir foot clamp for pipe Ø50 | 21 |
| 50.02.114P | Fitting 3/4" M/M | 9 |
| 10.01.339P | Fixing Elastomer | 7 |
| 50.02.325P | Fixing nut 3/4" | 9 |
| 10.02.168P | Fixture security for gas spring | 17 |
| 24.02.753P | Flange Bearing GSM-0809-08 | 17 |
| 54.02.056P | Flexible drain pipe DN50 | 29 |
| 82.00.291 | Flexible pipe 350mm for oil troley | 37 |
| 40.07.208P | Flowmeter cable | 9 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 16.03.491P | Front panel console | 11 |
| 16.03.878P | Front panel cover for USB assembly | 11 |
| 16.03.711P | Front panel for pan | 19 |
| 4001.0226V | Fuse 6.35x32mm 16A, time-lag | 37 |
| 82.00.251 | Fuse holder | 37 |
| 40.00.631S | Gas spring 350N | 41 |
| 20.03.743P | Gas spring 900N | 17 |
| 10.02.267P | Gasket 3x10mm | 19 |
| 20.00.993P | Gasket for plug pan valve | 19 |
| 50.02.324P | Gasket for water supply coupling 38x28 | 9 |
| 87.01.774S | Gasket kit for control panel cable | 5 |
| 20.01.518P | Graphit plate for safety temperature limiter | 19 |
| 12.02.971S | Guide tube for a supply cable | 21 |
| 87.01.833S | Hand shower removal kit | 45 |
| 52.00.127S | Hand shower black | 9 |
| 52.00.143P | Hand shower roll guide | 9 |
| 52.00.105P | Hand shower roll guide water supply | 9 |
| 2610.400279F | Handle | 37 |
| 40.06.428P | Heat sink 1 SSR | 7 |
| 82.00.268 | Hex nipple M3/8"-F1/4" | 37 |
| 1105.0121V | Hex combination nut M5 galv | 37 |
| 82.00.243 | Hex double nipple G 3/8" | 37 |
| 1008.0752P | Hex screw M5x10 | 41 |
| 10.02.033P | Hex screw M8x40 | 33 |
| 10.00.750P | Hex screw M8x70 | 17 |
| 1010.0763P | Hex screw M10x40 | 31 |
| 10.01.808P | Hex socket countersunk head screw M5x16 | 19 |
| 10.01.833P | Hexagon socket set screws with flat point M8x14 | 15, 17 |
| 10.01.054P | Hexagonal nut with notched flange M5 | 29 |
| 10.02.121P | Hexagonal spacer M4x40 | 29 |
| 42.00.342P | Holder for module CO61 | 29 |
| 50.02.072P | Holding spring | 13 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 10.02.239P | Hose clamp clic R86-145 | 9 |
| 10.02.240P | Hose clamp clic R96-290 | 13 |
| 87.01.907S | Hose repair kit D10mm | 45 |
| 2070.0048P | HT drain T-fitting 50mm | 13 |
| 42.00.413P | I/O movement PCB A13 | 7 |
| 20.03.382S | Inner bearing for pan | 17 |
| 16.04.064P | Inner protective cover of the control panel | 5 |
| 82.00.617 | Insulation set for oil cart | 39 |
| 40.06.583P | Interface cable USB 1,4m | 5, 11 |
| 87.01.814S | Kit connection to energy optimiser | 45 |
| 82.00.247 | Kit filling pipe | 37 |
| 82.00.265 | Kit heating element | 37 |
| 87.01.606S | Kit pan without pressure | 19 |
| 82.00.235 | Kit pump | 37 |
| 82.00.261 | Klixon 240° | 37 |
| 60.75.944P | Left wall bracket | 31 |
| 24.04.298P | Lid | 15 |
| 24.04.424S | Lid bearing with sealing ring | 17 |
| 60.71.704 | Lid complete oil cart | 39 |
| 24.04.954P | Lid gasket | 15 |
| 20.03.323S | Lift arm for pan | 17 |
| 87.01.759S | Lifting cylinder for height adjustable substructure | 29 |
| 24.04.352S | Lifting cylinder for lid | 17 |
| 20.03.297S | Lifting cylinder for pan | 17 |
| 87.01.840S | Lifting roller with axle | 41 |
| 60.75.939P | Locking bracket | 31 |
| 40.07.372P | Locking device for heat sink | 7 |
| 40.06.076P | Loudspeaker cable | 5 |
| 40.06.728P | Loudspeaker K 64 WPTR | 5 |
| 87.01.875S | Loudspeaker kit SL70 8W | 45 |
| 16.03.489P | Lower panel for pan | 19 |
| 12.00.224P | Lower part of pedestal 110mm | 23 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 24.02.804P | Magnet 22x10mm | 11 |
| 40.07.165S | Meat probe sensor | 15 |
| 87.01.758 | Memory-Stick USB iVario | 25 |
| 42.00.359P | Micro SD card | 5 |
| 42.00.305S | Module CO61 | 29 |
| 20.03.254P | Mounting piece for pan panel | 19 |
| 20.03.600P | O-ring 9.8x1.5 | 19 |
| 82.00.240 | O-ring 34x3 | 37 |
| 10.00.675P | O-ring f. pan valve 17.3 x 2.4 | 19 |
| 60.71.599 | Oil filter | 37 |
| 16.04.204S | On-Off sensor support | 5 |
| 82.00.363 | Overlay FRIMA oil cart | 39 |
| 82.00.234 | Overlay OEM oil cart | 39 |
| 60.74.940 | Overlay RATIONAL oil cart | 39 |
| 87.01.603S | Pan clamping bearing assembly | 17 |
| 20.03.500P | Pan drain hose | 13 |
| 20.03.670S | Pan flange left | 19 |
| 20.03.669S | Pan flange right | 19 |
| 20.03.475P | Pan front insulation | 19 |
| 10.01.778P | Pan head screw Torx M4x16 | 29 |
| 10.00.061P | Pan head screw Torx T20 M4x12 | 29 |
| 10.01.776P | Pan head screw Torx T20 M4x12 | 33 |
| 10.01.616P | Pan head screw Torx T40 M8x16 | 17, 21, 23, 29, 33 |
| 20.03.190S | Pan shaft | 17 |
| 20.03.700S | Pan spout reinforcement | 19 |
| 20.01.598P | Pan valve cable | 19 |
| 10.01.849P | Parallel key 14x9x40 | 15 |
| 54.00.755P | Pipe PP DN50 x 250 | 13 |
| 10.02.198P | Plastic spacer 7mm for 3mm thickness | 21 |
| 10.01.336P | Plastic spacer 7mm 12 | 7 |
| 10.01.928P | Plug 6.6 for threaded hole M8 | 23, 29 |
| 20.01.653S | Plug for pan valve with gasket | 19 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 50.00.085P | Plug-in spring f. hand shower roll guide | 9 |
| 87.01.821S | Potential free contact adapter kit | 45 |
| 40.07.175P | Power + bus cable for height-adjustable substructure | 29 |
| 40.05.947P | Power harness heating element | 19 |
| 40.06.713P | Power supply | 7 |
| 54.00.567P | PP-Pipe DN40 x 150mm | 13 |
| 54.00.564P | PP-Pipe DN50 x 150mm | 13 |
| 10.01.906P | Printed circuit board holder, clip-on H=6mm | 7 |
| 42.00.356P | Protection board for socket outlet protection | 11 |
| 40.00.404P | Pulse generator | 5 |
| 10.02.263P | Raised countersunk head screw Torx M4x10 T20 | 7 |
| 42.00.311P | Relay-I/O pcb A10 | 7 |
| 12.02.939P | Removable part of the right frame | 21 |
| 87.01.783S | Repair kit for technical box thread | 45 |
| 87.01.901S | Retrofit kit hot water option | 45 |
| 87.01.792S | Retrofit kit interface Ethernet | 45 |
| 87.01.848S | Retrofit kit lockable control panel RATIONAL | 45 |
| 87.01.793S | Retrofit substructure body assembly | 23 |
| 60.75.926P | Right wall bracket | 31 |
| 60.70.131P | Roller 25/6.5 HM5 stainless steel | 41 |
| 82.00.288 | Round panel | 37 |
| 42.00.352P | RS232 converter for adjustable height | 29 |
| 40.04.501P | Safety temperature limiter 130° | 19 |
| 40.02.337P | Safety temperature limiter 215°C | 19 |
| 40.02.337 | Safety temperature limiter 215°C | 37 |
| 40.04.370P | Safety temperature limiter heating element | 19 |
| 10.00.280P | Screw HM 8x12 A2 | 41 |
| 40.00.701S | Screwed cable gland polyamid PG40 | 7, 21 |
| 16.03.706P | Sealing device for left panel | 19 |
| 82.00.255 | Selector 2 positions lighted | 37 |
| 82.00.256 | Selector 3 positions spring return | 37 |
| 42.00.346P | Sensor on / off | 5 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 40.06.578P | Set of power supply cables for pan and lid cylinders | 17 |
| 20.02.653S | Shaft hoist swing shaft 10x38 | 17 |
| 20.01.587S | Sheath for pan valve | 19 |
| 40.06.762P | Short power supply cable height adjustable cylinder | 29 |
| 12.02.531P | Shower roll guide holder | 21 |
| 16.04.236P | Shutter sticker option without differential protection | 11 |
| 60.76.629S | Side hatch for storage space | 33 |
| 16.03.553P | Side panel left for console | 11, 21 |
| 16.03.372P | Side panel left of pan | 19 |
| 16.03.554P | Side panel right for console | 11 |
| 16.03.556P | Side panel right of pan | 19 |
| 24.04.939P | Silicone hose diameter 20/26mm | 13, 15 |
| 10.01.468P | Sintered bronze bushings | 17 |
| 10.01.669P | Slot counter head secur screw M5X20 Phillips | 9, 23, 29, 35 |
| 40.01.409P | Socket 2P+T 16A (France) | 11 |
| 10.00.144P | Socket cap screw M3x16mm | 7 |
| 10.01.953P | Socket cap screw M10x35 A2 Tuflok | 23 |
| 16.03.997P | Socket flap | 11 |
| 50.02.067P | Solenoid valve block with flowmeter | 9 |
| 40.05.670P | Solid state relais | 7 |
| 40.05.840P | Solid state relais | 7 |
| 10.01.538P | Spacer D10x6x1mm | 41 |
| 20.01.508P | Spacer for safety temperature limiter | 19 |
| 10.01.907P | Spacer Ø int = 3,2mm, H = 6mm | 7 |
| 40.04.522 | Spiral cable AUS | 39 |
| 40.04.520 | Spiral cable CH | 39 |
| 40.04.521 | Spiral cable DK | 39 |
| 40.04.518 | Spiral cable FR/DE | 39 |
| 40.04.519 | Spiral cable UK | 39 |
| 24.05.622P | Spring stop | 13 |
| 20.03.024P | Stop for pan | 19 |
| 12.01.086S | Stop for pan on cross frame | 21 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 24.05.037P | Stopper D9 | 15 |
| 60.74.416P | Substructure body | 23, 29 |
| 60.74.536P | Substructure bottom plate | 23 |
| 60.76.100P | Substructure cover plate | 35 |
| 60.74.474P | Substructure hatch | 23, 29 |
| 60.76.098P | Substructure panelling support | 35 |
| 82.00.246 | Suction pipe complete | 37 |
| 60.71.850 | Support of oil filter | 37 |
| 60.74.713S | Telescopic foot | 29 |
| 82.00.248 | Terminal block 4mm² | 37 |
| 82.00.249 | Terminal block 4mm² blue | 37 |
| 40.06.252P | Termination resistor | 7 |
| 87.00.339 | Thermocouple for heating element | 19 |
| 40.05.933P | Thermocouple harness | 19 |
| 40.06.857S | Thermocouple pan left | 19 |
| 82.00.254 | Timing relay | 37 |
| 12.00.205P | Upper part of pedestal | 23 |
| 40.06.045P | USB socket cover | 11 |
| 20.03.466P | V-profile gasket | 19 |
| 60.75.931P | Wall mounting hook | 31 |
| 60.75.920P | Wall mounting panelling | 31 |
| 60.75.984P | Wall mounting panelling gasket | 31 |
| 1308.0162P | Washer A8,4 | 41 |
| 10.00.178P | Washer M5 | 41 |
| 1308.0160P | Washer M8 A2 | 17, 31 |
| 1900.0202P | Water filter | 9 |
| 50.02.094P | Water supply pipe | 9 |
| 12.02.399P | X-ring 55x5.33 | 17 |
| 12.02.398P | X-ring 85x5.33 | 17 |

RATIONAL Aktiengesellschaft
Siegfried-Meister-Straße 1
86899 Landsberg am Lech
Germany