# Service part catalogue

## iVario® ab 03/2020 Pro 2-S (112) - 2 x 19 dm², 2 x 25 L 91

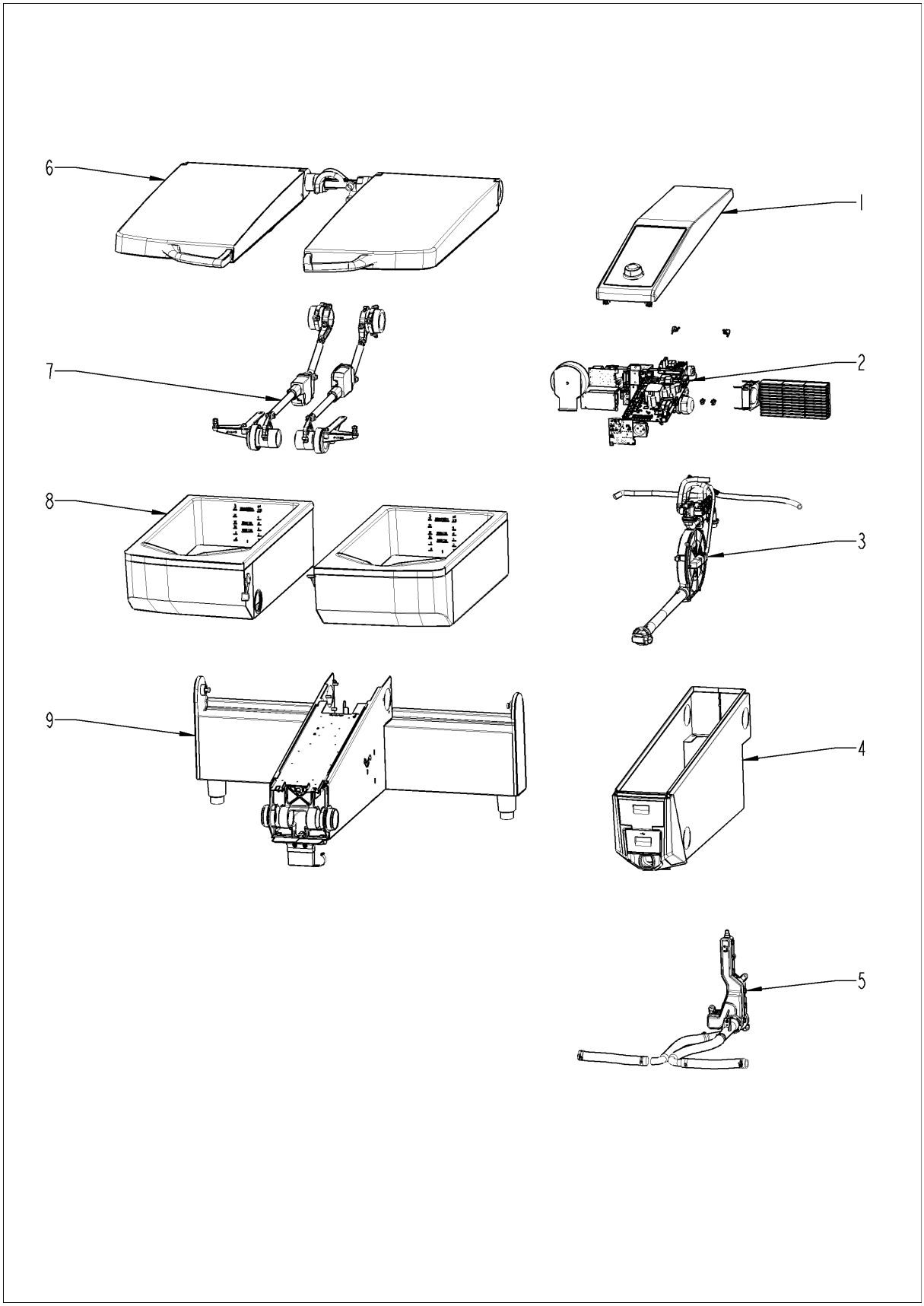
**E11VK2110**



8.12.2021 r.
3NAC400 V 50/60Hz

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

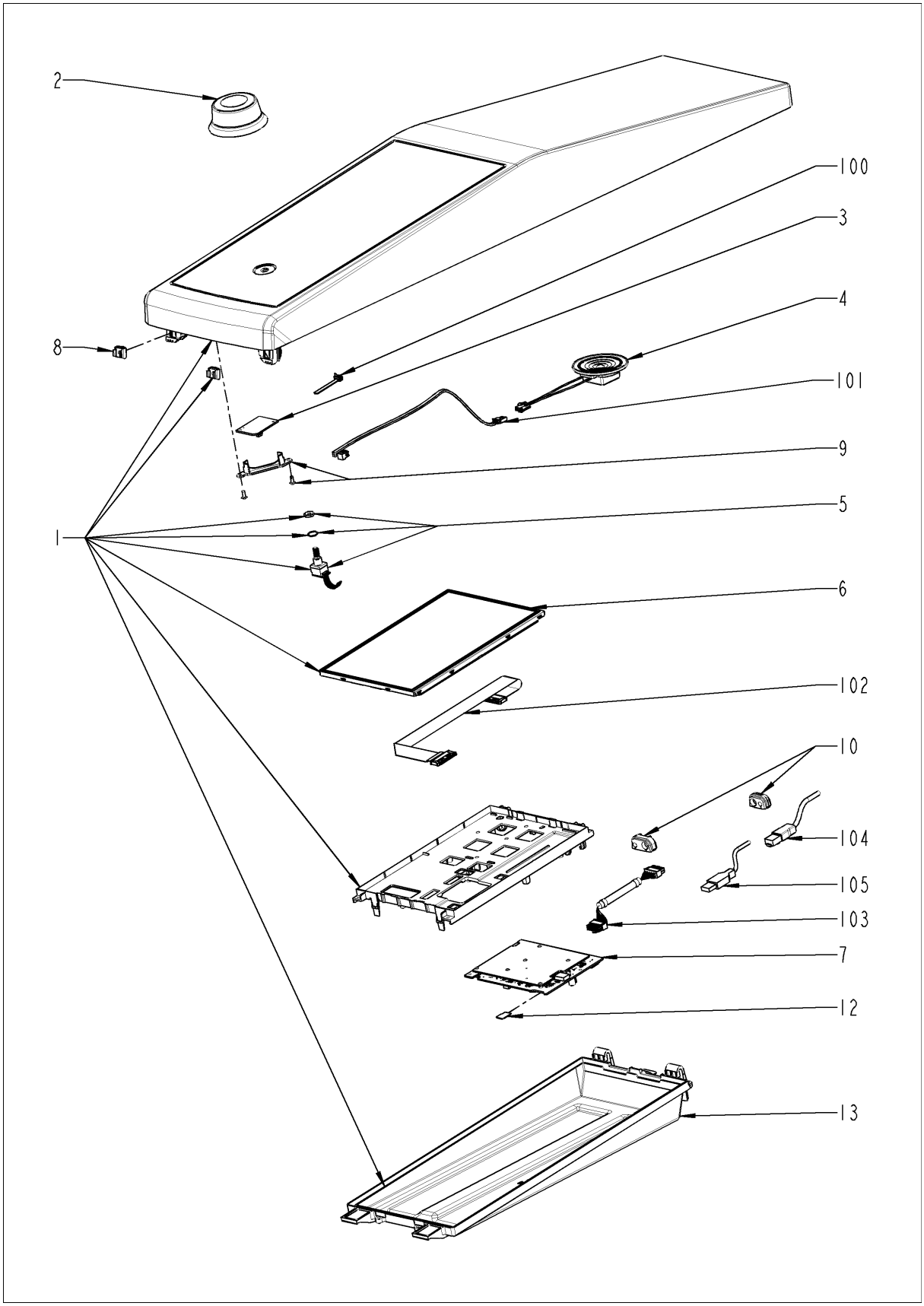
# Overview



# 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 | 24 |
| 20 | Accessories | 26 |
| 30 | Repair and retrofit kit | 42 |

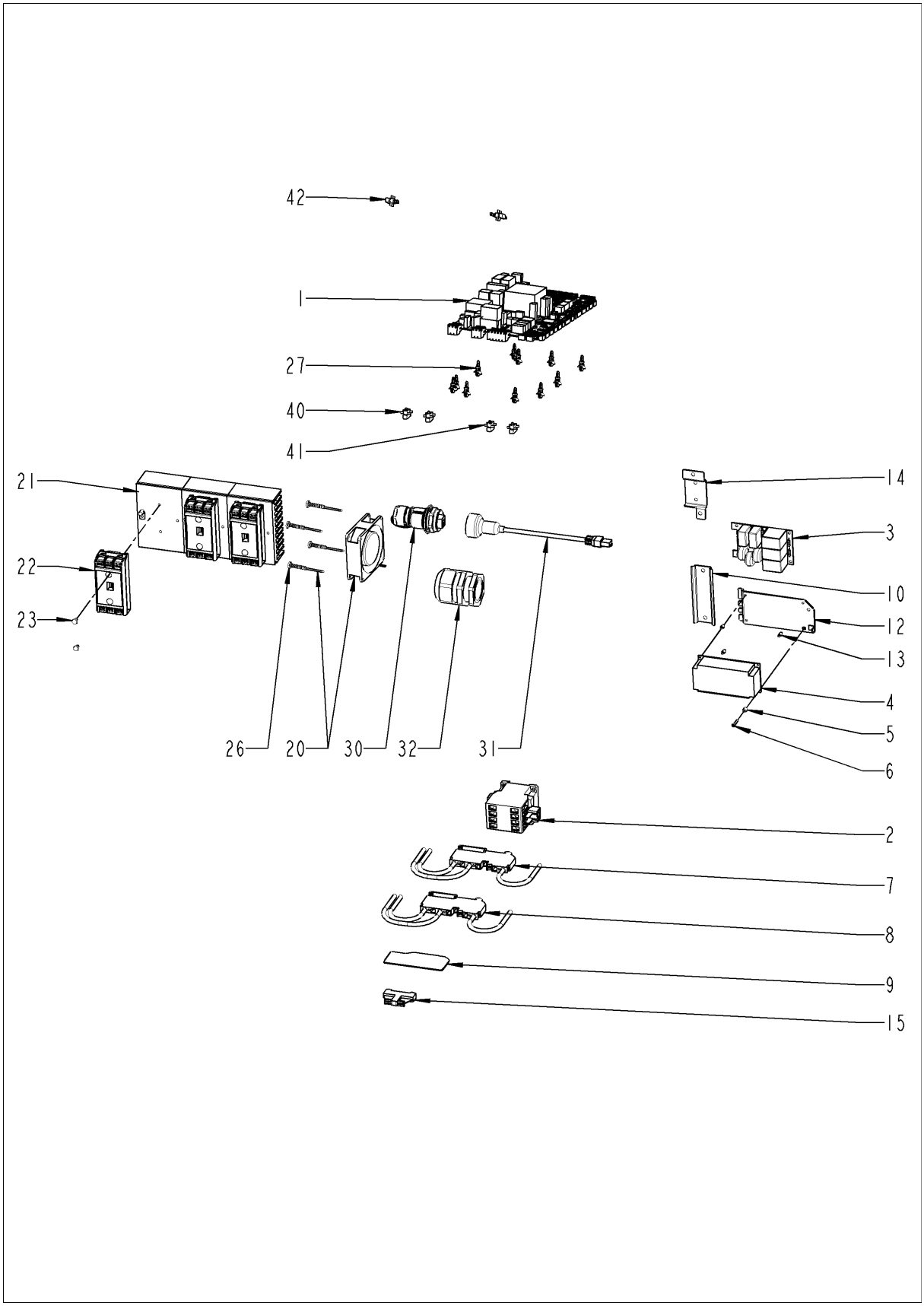
# Control panel



# 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 |

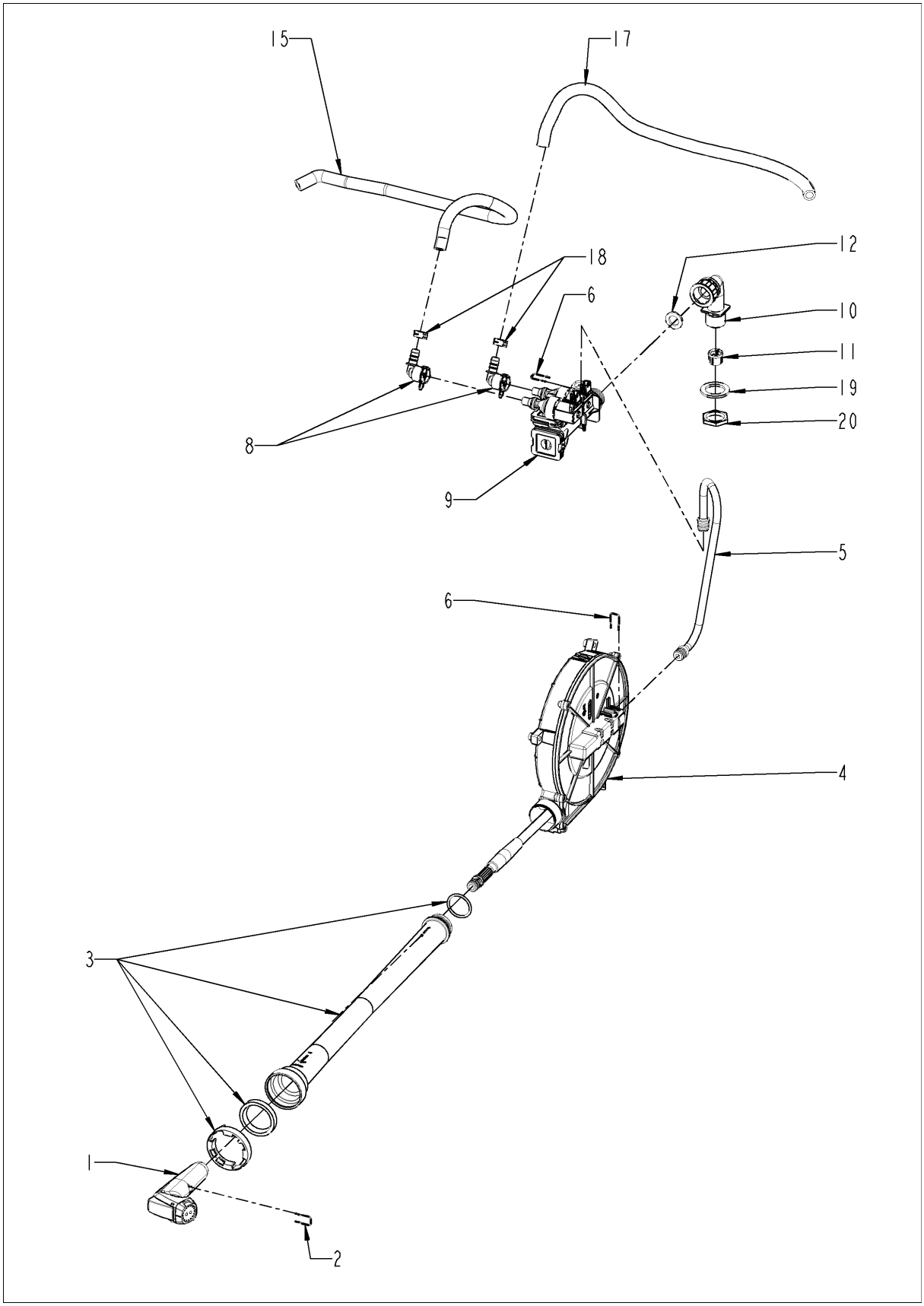
# Electrical installation



# Electrical installation

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 87.01.860S | 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 | 40.07.637P | Bus cable for A13 I/O board | 1 |
| 2 | 40.07.420P | Contactor K3-18NBV10 190R T B01 AZ | 1 |
| 3 | 42.00.322P | Electronic noice filter | 1 |
| 4 | 40.06.712P | 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 | 40.06.427P | Double level terminal block 10mm² blue | 1 |
| 8 | 40.04.643P | Double leven earth terminal 10mm² yellow/green | 1 |
| 9 | 40.07.120P | End flask for block APFN 6 D1/2/35 | 1 |
| 10 | 12.02.769P | Installation rail for Contactor Din 46277 | 1 |
| 12 | 12.02.847P | Power supply support | 1 |
| 13 | 10.01.906P | Printed circuit board holder, clip-on H=6mm | 3 |
| 14 | 12.02.902P | Contactor support | 1 |
| 15 | 4001.1203P | End plate for mounting rail | 1 |
| 20 | 40.06.806S | Cooling fan | 1 |
| 21 | 40.06.028P | Heat sink 1 SSR | 3 |
| 22 | 40.05.670P | Solid state relais | 3 |
| 23 | 10.02.263P | Raised countersunk head screw Torx M4x10 T20 | 6 |
| 26 | 10.01.339P | Fixing Elastomer | 4 |
| 27 | 10.01.336P | Plastic spacer 7mm 12 | 11 |
| 31 | 40.06.732P | Interface cable LAN 2,3m | 1 |
| 32 | 40.02.594P | Screwed cable gland PG 29 | 1 |
| 40 | 40.06.710P | Micro switch bundle lifting cylinder left S23/S24 X138 | 1 |
| 41 | 40.06.711P | Micro switch bundle lifting cylinder right S29/S30 X138 | 1 |
| 42 | 40.06.709P | Micro switch bundle lid up S10/S12 X150 | 1 |
| 100 | 40.06.095P | Control harness | 1 |
| 109 | 40.04.656P | Micro switch NC, NO with strip | 1 |

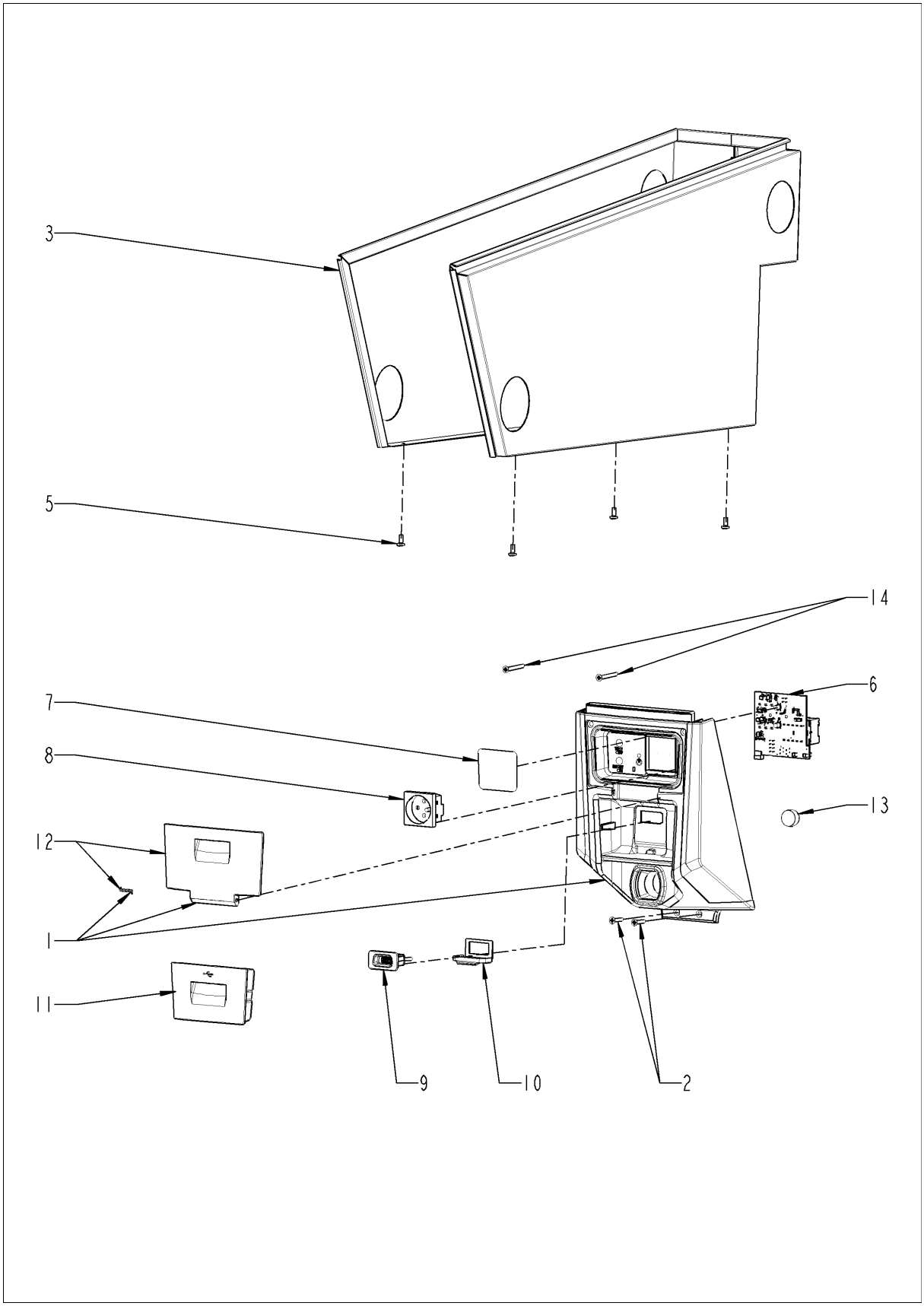
# Water distribution



# 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 | 87.01.615S | Connection pipe hand shower roll guide | 1 |
| 4 | 52.00.085P | Hand shower roll guide | 1 |
| 5 | 52.00.094P | 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° | 2 |
| 9 | 50.02.064P | Double solenoid valve block with flowmeter | 1 |
| 10 | 50.02.087P | Elbow fitting 3/4" M/F | 1 |
| 11 | 1900.0202P | Water filter | 1 |
| 12 | 50.02.337P | 3/4" gasket 3mm thick | 1 |
| 18 | 10.02.239P | Hose clamp clic R86-145 | 2 |
| 19 | 50.02.351P | Gasket 26.8x38.8x3mm | 1 |
| 20 | 50.02.325P | Fixing nut 3/4" | 1 |
| 100 | 40.07.208P | Flowmeter cable | 1 |

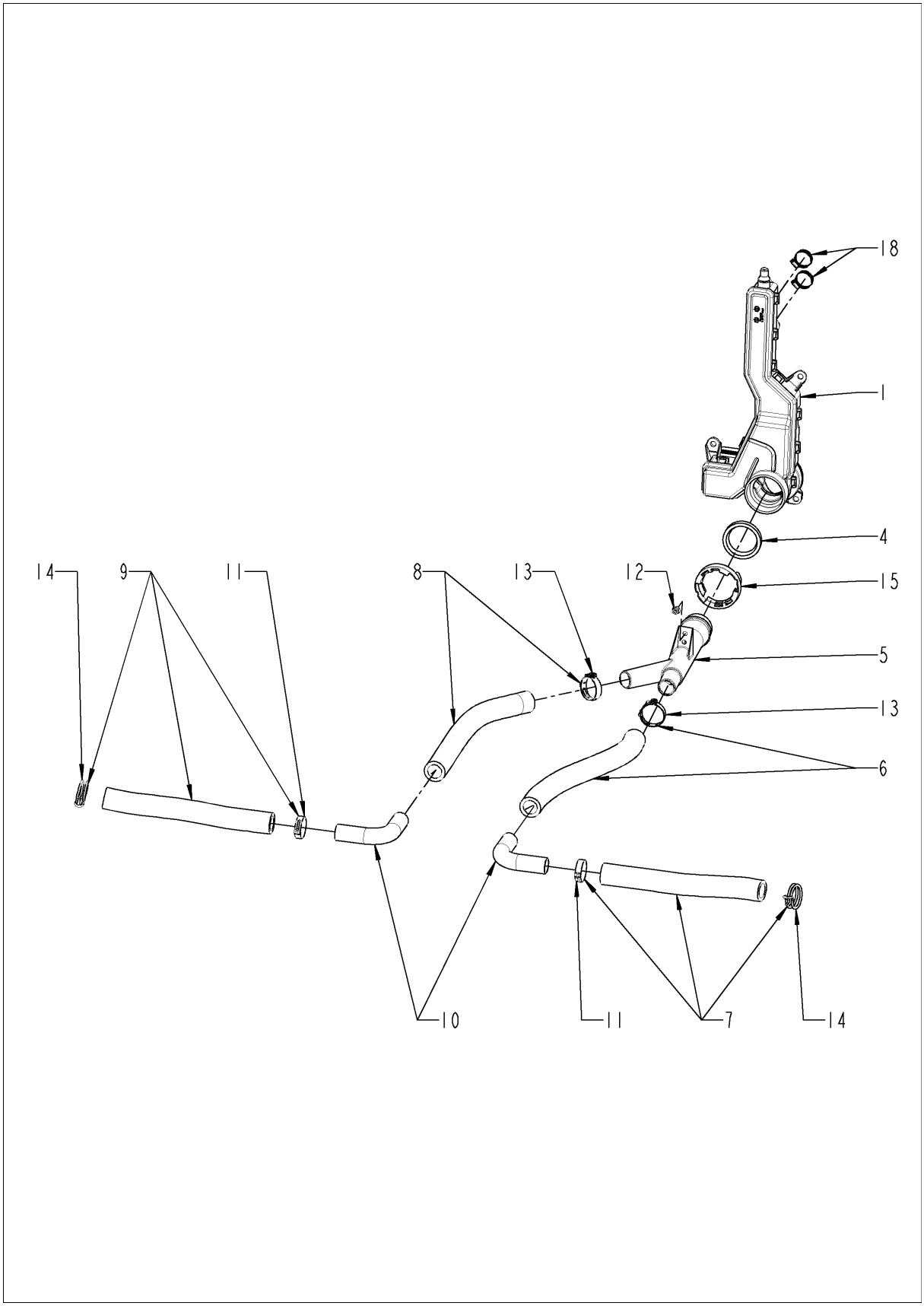
# Console



# Console

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 16.03.791P | Front panel console | 1 |
| 2 | 10.01.669P | Slot counter head secur screw M5X20 Phillips | 2 |
| 3 | 16.03.859P | Console panelling | 1 |
| 5 | 10.01.615P | Pan head screw Torx M5x16 | 4 |
| 7 | 16.04.236P | Shutter sticker option without differential protection | 1 |
| 8 | 40.02.405P | Obturator of socket-outlet | 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 |

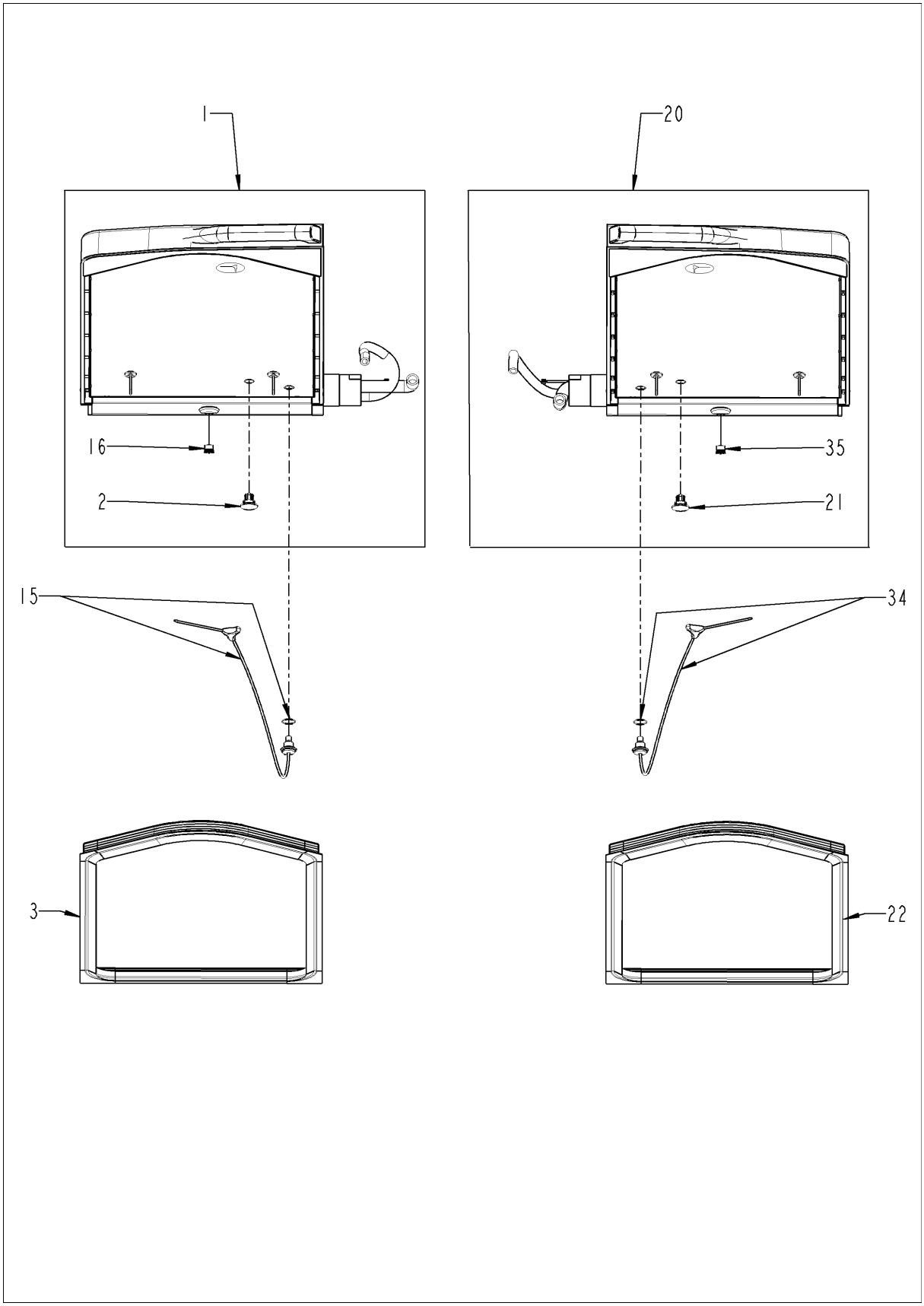
# Water drain



# Water drain

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 54.02.063P | Control chamber | 1 |
| 4 | 54.01.935P | Lip seal D40 | 1 |
| 5 | 54.01.899P | Discharge pipe 2xØ22/Ø40 | 1 |
| 6 | 54.01.997S | Drain hose | 1 |
| 7 | 54.01.996S | Pan drain pipe | 1 |
| 8 | 54.01.997S | Drain hose | 1 |
| 9 | 54.01.996S | Pan drain pipe | 1 |
| 10 | 50.01.670P | Ellbow stainless 90° Ø22x1 | 2 |
| 11 | 10.01.446P | Hose clamp clic R96-300 | 2 |
| 12 | 10.01.054P | Hexagonal nut with notched flange M5 | 1 |
| 13 | 10.02.238P | Hose clamp clic R96-315 | 2 |
| 14 | 2066.0522P | Hose clamp ø 31,3 mm | 2 |
| 15 | 54.02.053P | Locking ring | 1 |
| 18 | 10.02.313P | Clamp 21,8-27 | 2 |

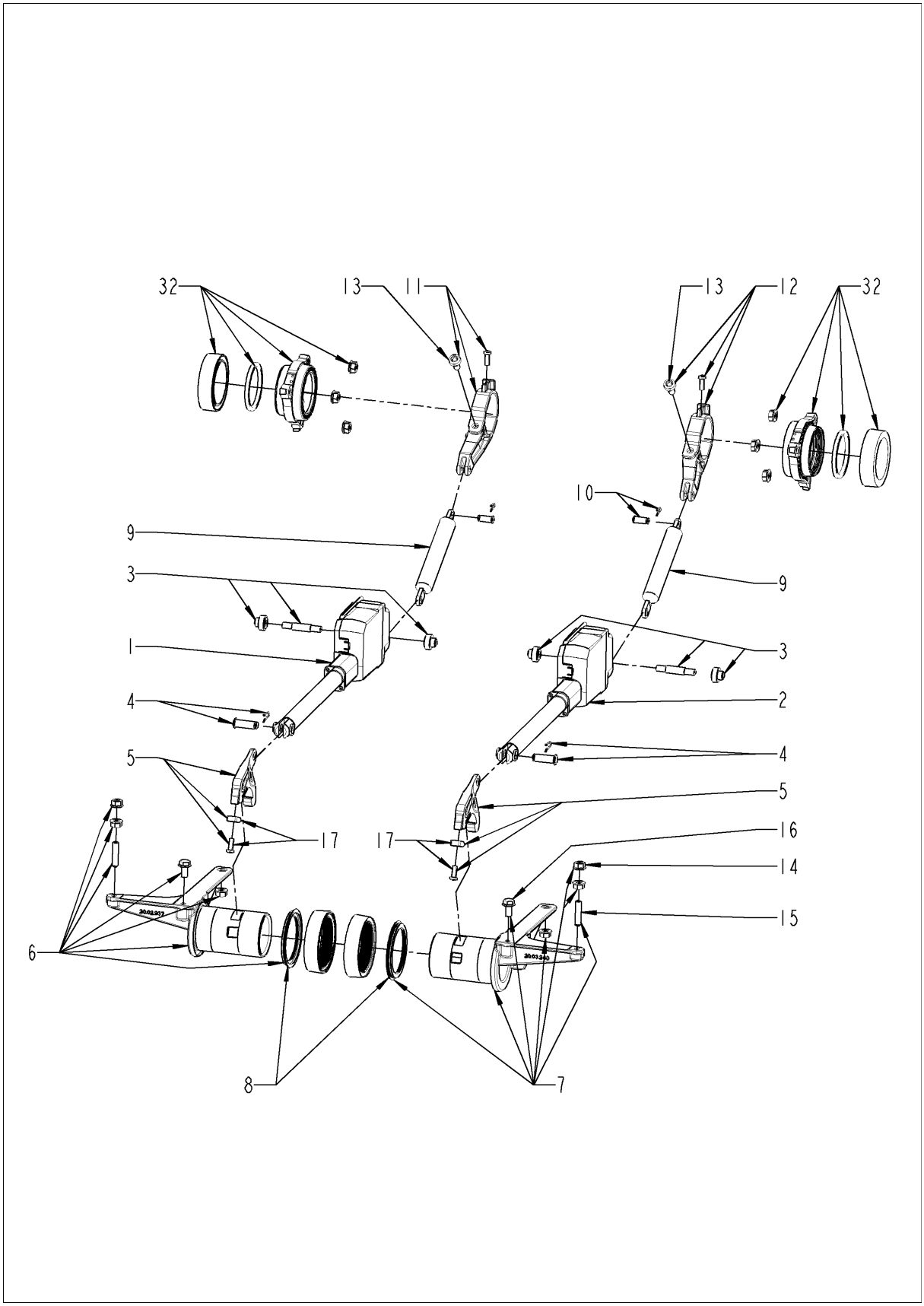
# Lid



# Lid

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 24.04.293P | Lid left | 1 |
| 2 | 24.04.711P | Cover for pressure connection | 1 |
| 3 | 24.04.951P | Lid gasket | 1 |
| 15 | 40.07.165S | Meat probe sensor | 1 |
| 16 | 50.02.248S | Aerator with service key | 1 |
| 20 | 24.04.292P | Lid right | 1 |
| 21 | 24.04.711P | Cover for pressure connection | 1 |
| 22 | 24.04.951P | Lid gasket | 1 |
| 34 | 40.07.164S | Meat probe sensor, right lid | 1 |
| 35 | 50.02.248S | Aerator with service key | 1 |

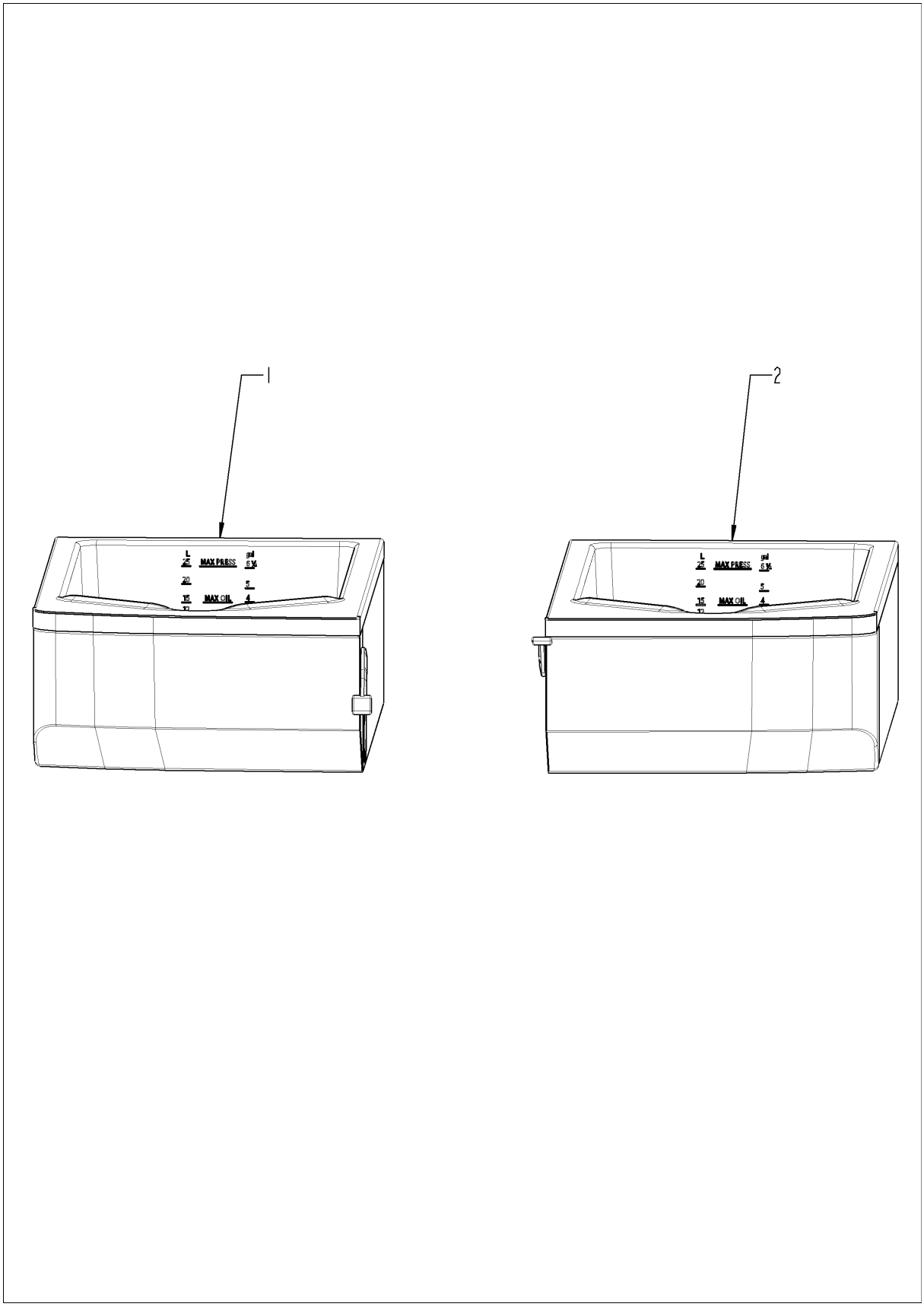
# Kinematic



# Kinematic

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 20.03.678P | Lifting cylinder for pan and lid | 1 |
| 2 | 20.03.678P | Lifting cylinder for pan and lid | 1 |
| 3 | 24.04.882S | Axis Autolift | 2 |
| 4 | 20.02.130S | Shaft jack | 2 |
| 5 | 20.02.872S | Lift arm for pan | 2 |
| 6 | 20.02.937S | Left pan shaft | 1 |
| 7 | 20.03.248S | Pan shaft right | 1 |
| 8 | 20.02.940P | Sealing ring for pan shaft | 2 |
| 9 | 24.04.307P | Jack gas 900N | 2 |
| 10 | 24.04.155S | Shaft jack D8 with staple pin | 1 |
| 11 | 24.03.808S | Lift arm for lid left | 1 |
| 12 | 24.04.148S | Lift arm for lid right | 1 |
| 13 | 10.01.616P | Pan head screw Torx T40 M8x16 | 2 |
| 14 | 10.01.851P | Collar nut M8 locking teeh | 6 |
| 15 | 10.01.479P | Hex socket set screw cup point A2 M8x35 Tuflok | 2 |
| 16 | 1008.0768P | Ornamental screw M8x16 | 2 |
| 17 | 20.02.588S | Fixing plate lever pan | 2 |
| 32 | 24.04.424S | Lid bearing with sealing ring | 2 |
| 100 | 40.04.656P | Micro switch NC, NO with strip | 1 |

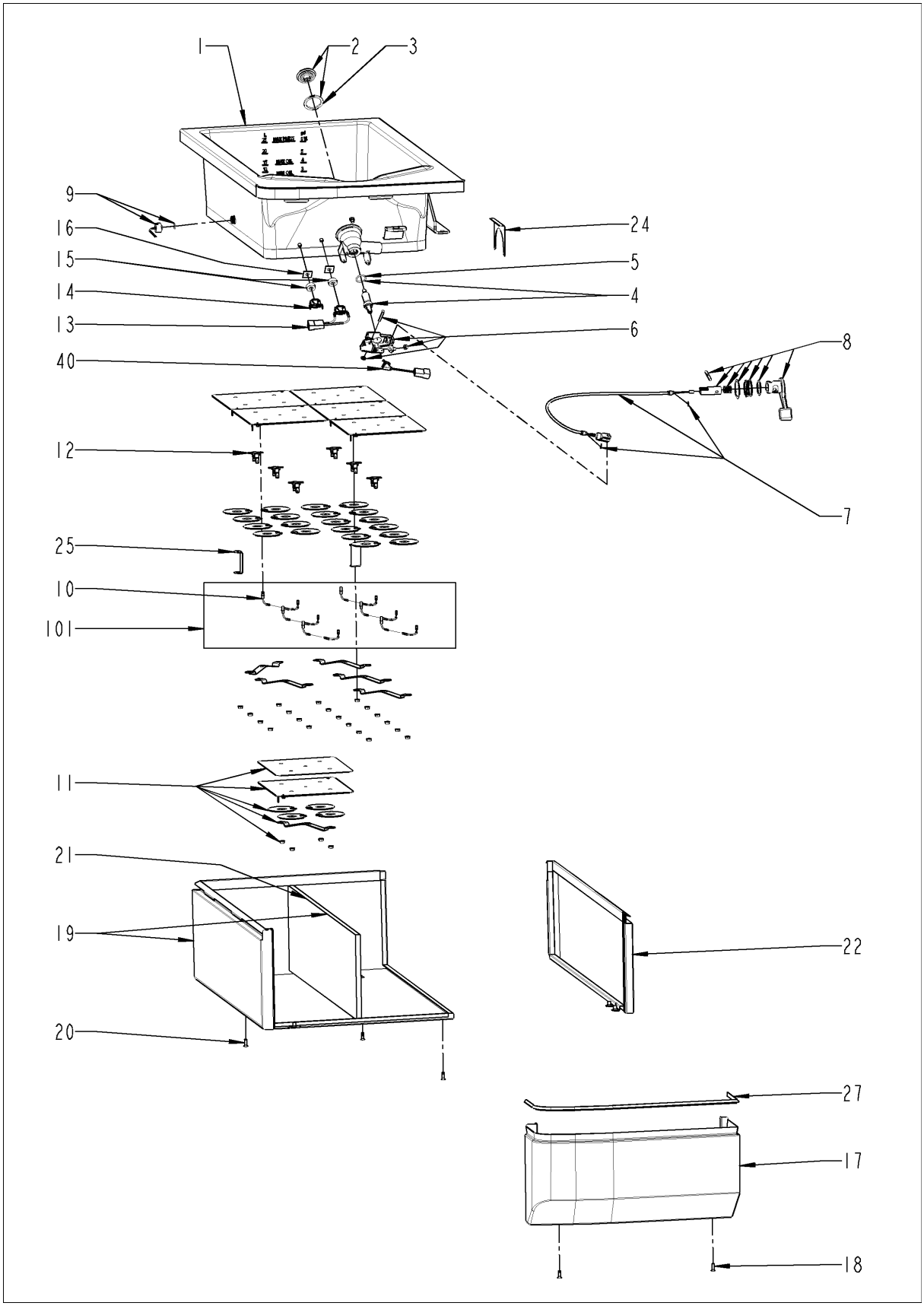
# Pan



# Pan

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | | Pan left | 1 |
| 2 | | Pan right | 1 |

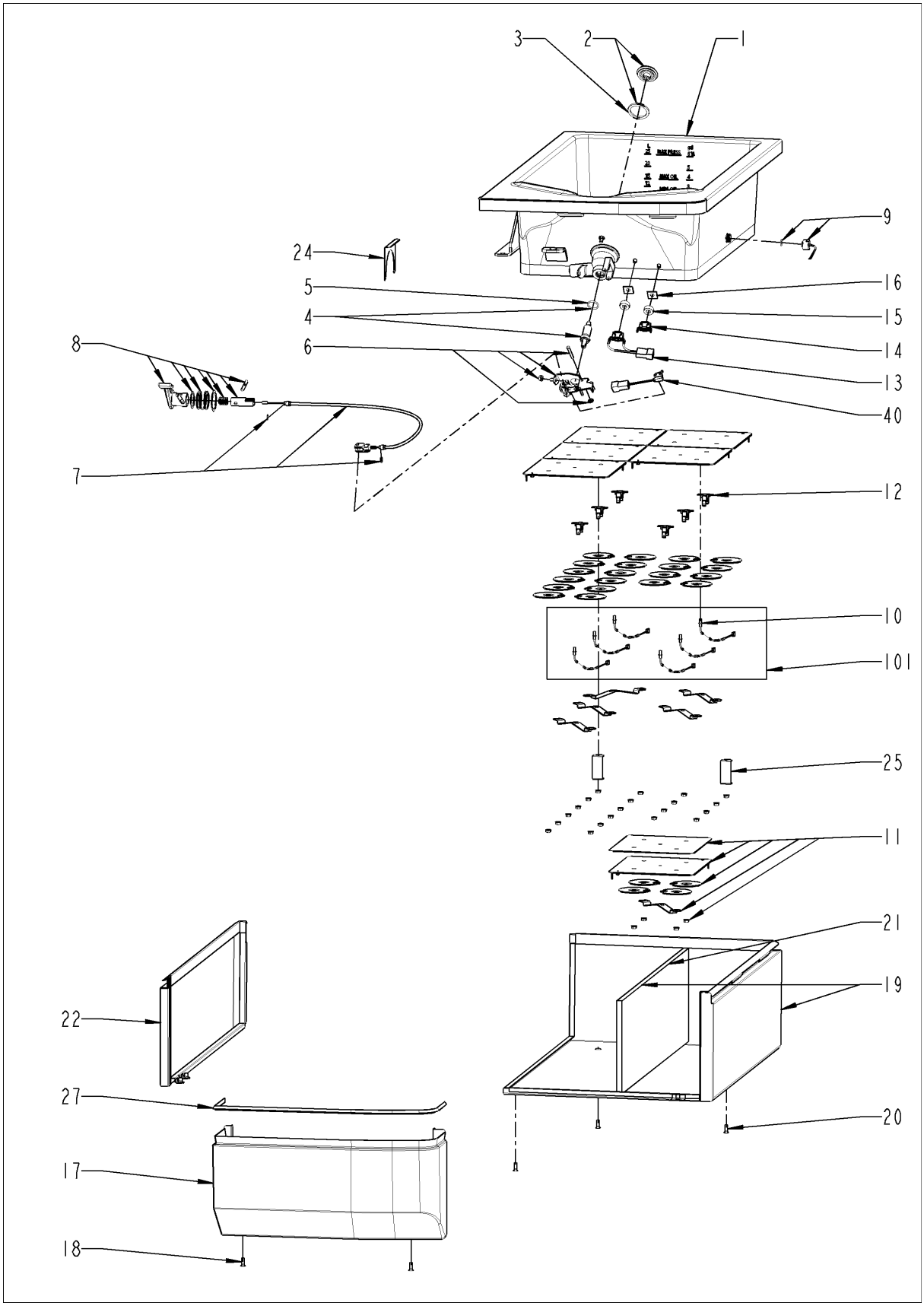
# Pan left



# Pan left

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 87.01.775S | Kit pan left without pressure | 1 |
| 2 | 20.01.712S | Plug for pan valve with gasket | 1 |
| 3 | 20.00.992P | Gasket for plug pan valve | 1 |
| 4 | 20.00.905S | Sheath for pan valve | 1 |
| 5 | 10.00.675P | O-ring f. pan valve 17.3 x 2.4 | 1 |
| 6 | 20.02.199S | Actuation for pan valve | 1 |
| 7 | 20.02.168P | Pan valve cable | 1 |
| 8 | 87.00.618 | Control lever left of pan valve | 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 | 6 |
| 12 | 40.04.370P | Safety temperature limiter heating element | 6 |
| 13 | 40.04.501P | Safety temperature limiter 130° | 1 |
| 14 | 40.04.512P | Safety temperature limiter 205°C | 1 |
| 15 | 20.01.508P | Spacer for safety temperature limiter | 2 |
| 16 | 20.01.518P | Graphit plate for safety temperature limiter | 2 |
| 17 | 20.03.563P | Left pan front panel | 1 |
| 18 | 10.01.808P | Hex socket countersunk head screw M5x16 | 2 |
| 19 | 20.02.943P | Side panel left of pan left | 1 |
| 20 | 10.01.808P | Hex socket countersunk head screw M5x16 | 3 |
| 21 | 20.03.472P | Pan insulation | 1 |
| 22 | 20.02.935P | Side panel right for pan left | 1 |
| 24 | 20.03.324P | Clip of pan side panel | 1 |
| 25 | 20.03.265P | Mounting angle for pan panel | 2 |
| 27 | 20.03.466P | V-profile gasket | 1 |
| 40 | 40.05.712P | Micro switch pan valve position | 1 |
| 100 | 40.05.944P | Power harness heating element pan left | 1 |
| 101 | 40.05.931P | Thermocouple harness left and right | 1 |

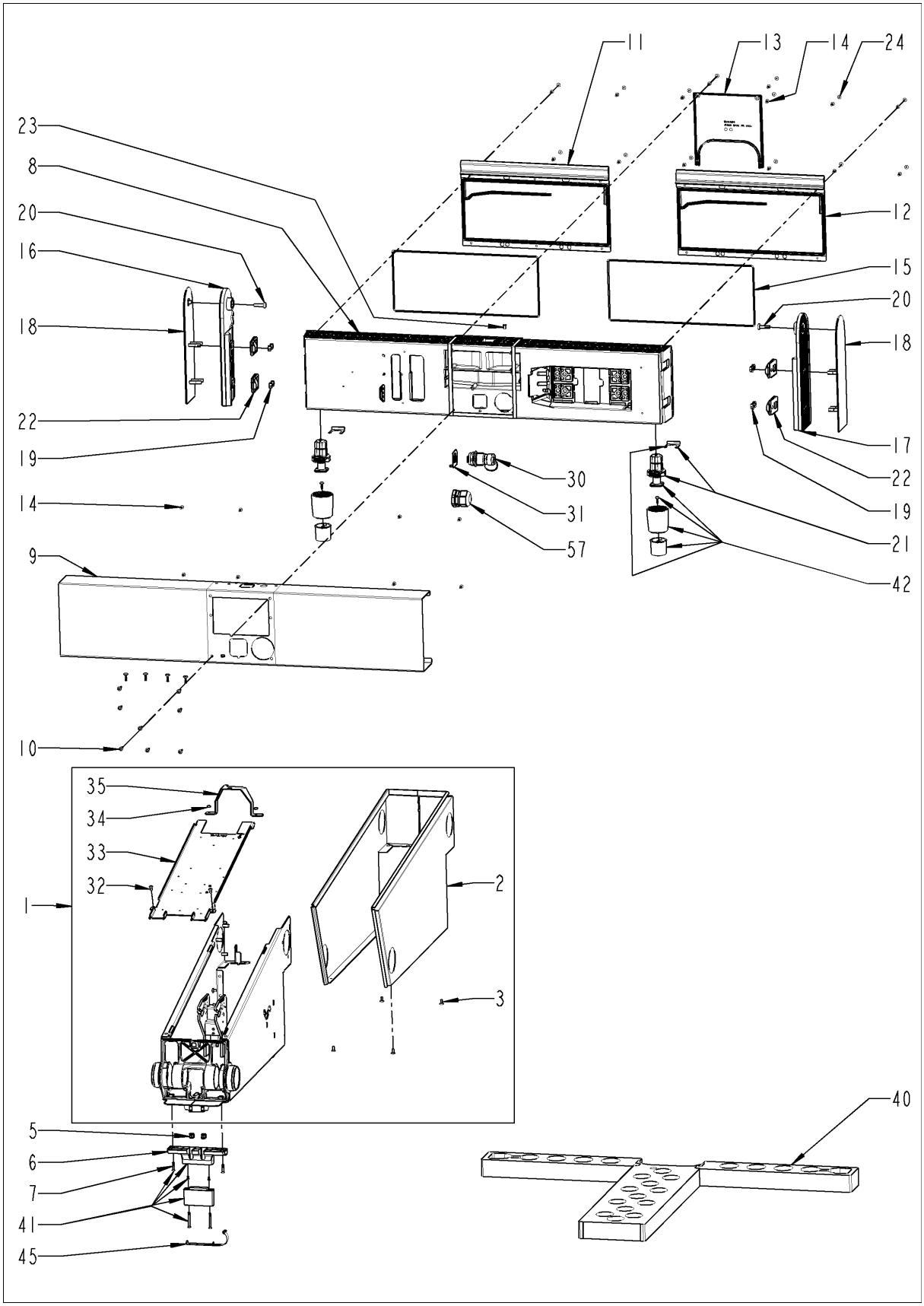
# Pan right



# Pan right

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 87.01.776S | Kit pan right without pressure | 1 |
| 2 | 20.01.712S | Plug for pan valve with gasket | 1 |
| 3 | 20.00.992P | Gasket for plug pan valve | 1 |
| 4 | 20.00.905S | Sheath for pan valve | 1 |
| 5 | 10.00.675P | O-ring f. pan valve 17.3 x 2.4 | 1 |
| 6 | 20.01.030S | Actuation for pan valve | 1 |
| 7 | 20.02.168P | Pan valve cable | 1 |
| 8 | 87.00.619 | Control lever right of pan valve | 1 |
| 9 | 40.06.858S | Thermocouple pan right | 1 |
| 10 | 87.00.339 | Thermocouple for heating element | 1 |
| 11 | 87.00.674 | Conversion kit heating element 2287W 230V | 6 |
| 12 | 40.04.370P | Safety temperature limiter heating element | 1 |
| 13 | 40.04.501P | Safety temperature limiter 130° | 1 |
| 14 | 40.04.512P | Safety temperature limiter 205°C | 1 |
| 15 | 20.01.508P | Spacer for safety temperature limiter | 2 |
| 16 | 20.01.518P | Graphit plate for safety temperature limiter | 2 |
| 17 | 20.03.565P | Right pan front panel | 1 |
| 18 | 10.01.808P | Hex socket countersunk head screw M5x16 | 2 |
| 19 | 20.02.950P | Side panel right of pan right | 1 |
| 20 | 10.01.808P | Hex socket countersunk head screw M5x16 | 3 |
| 21 | 20.03.472P | Pan insulation | 1 |
| 22 | 20.02.949P | Side panel left of pan right | 1 |
| 24 | 20.03.324P | Clip of pan side panel | 1 |
| 25 | 20.03.265P | Mounting angle for pan panel | 2 |
| 27 | 20.03.466P | V-profile gasket | 1 |
| 40 | 40.05.712P | Micro switch pan valve position | 1 |
| 100 | 40.05.945P | Power harness heating element pan right | 1 |
| 101 | 40.05.931P | Thermocouple harness left and right | 1 |

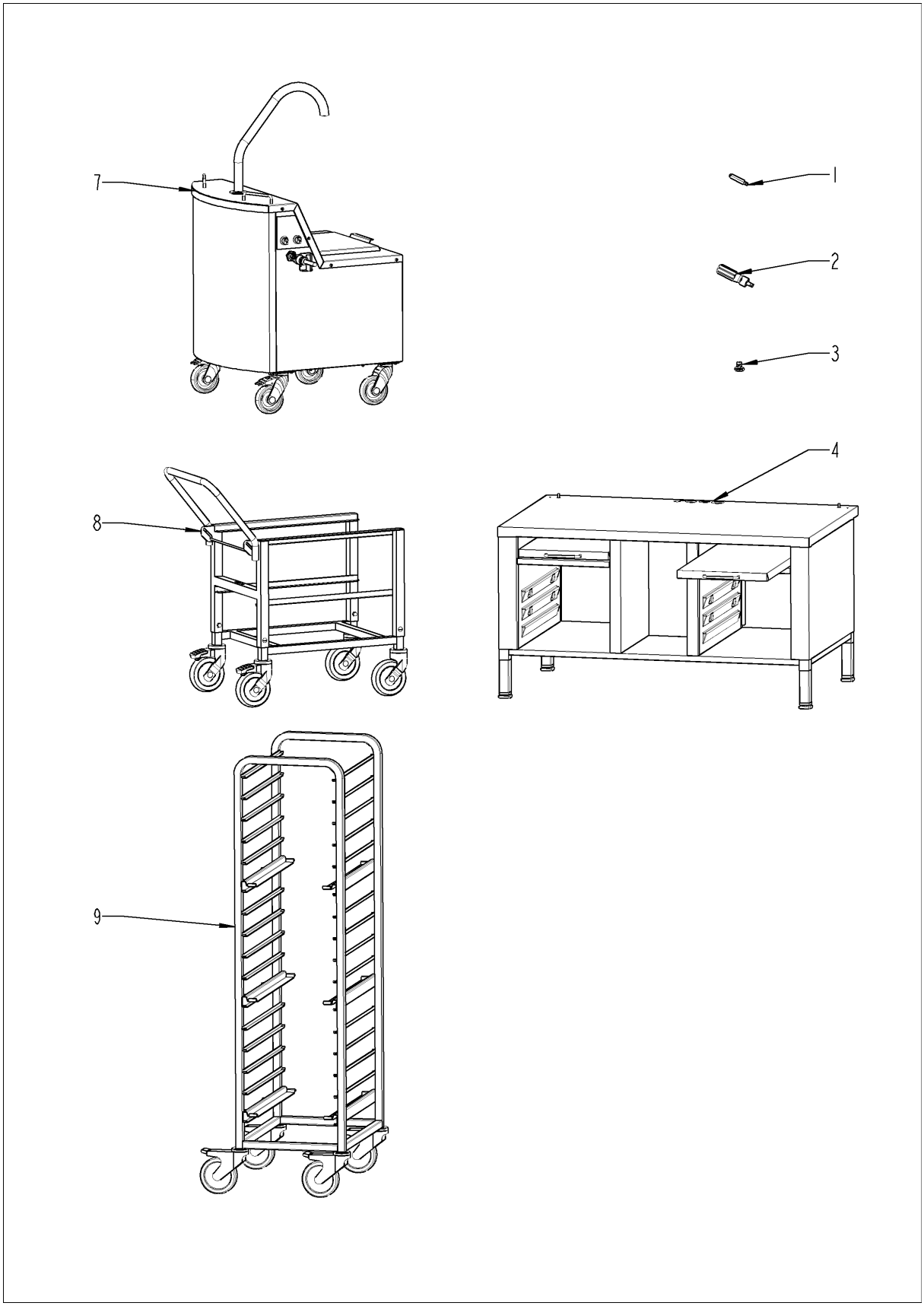
# Base structure



# Base structure

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 12.02.979P | Chassis central | 1 |
| 2 | 16.03.859P | Console panelling | 1 |
| 3 | 10.01.912P | Crosshead screw M5x12 | 4 |
| 5 | 10.01.862P | Cage nut M5 for 1.7 up to 2.5mm | 2 |
| 6 | 12.02.707P | Front foot 45mm | 1 |
| 7 | 10.01.669P | Slot counter head secur screw M5X20 Phillips | 2 |
| 8 | 12.02.088P | Rear technical compartment | 1 |
| 9 | 16.03.552P | Rear technical compartment cladding | 1 |
| 10 | 10.01.842P | Pan head screw Torx Ejot PT WA5463 60x1,8x18 | 12 |
| 11 | 12.02.159P | Cover left - right for rear technical compartment | 1 |
| 12 | 12.02.159P | Cover left - right for rear technical compartment | 1 |
| 13 | 12.02.684P | Central cover for rear technical compartment | 1 |
| 14 | 10.02.080P | Countersunk screw DELTA PT 50*16 T+25 A2 | 14 |
| 15 | 12.02.434P | Gasket for rear technical compartment cover | 2 |
| 16 | 12.02.157P | Outer bearing for lid left | 1 |
| 17 | 12.02.397P | Outer bearing for lid right | 1 |
| 18 | 12.02.408P | Protection for lid outer bearing | 2 |
| 19 | 10.01.851P | Collar nut M8 locking teeh | 8 |
| 20 | 10.01.616P | Pan head screw Torx T40 M8x16 | 2 |
| 21 | 12.02.423S | Adjustable rear foot 45mm with locking clip | 2 |
| 22 | 12.02.472P | Spacer for rear technical compartment | 4 |
| 23 | 54.02.012P | Plug D7x10mm | 1 |
| 24 | 10.02.227P | Cap for T25 Torx screws | 14 |
| 31 | 12.02.450P | Fixing device for Ethernet connector | 1 |
| 32 | 10.01.878P | Cylinder head screw torx M5x10 | 2 |
| 33 | 12.02.623P | Electric circuit board support | 1 |
| 34 | 10.01.054P | Hexagonal nut with notched flange M5 | 2 |
| 35 | 12.02.643P | Slides linkage | 1 |
| 40 | 60.75.807P | Foam support | 1 |
| 41 | 87.01.591S | Front foot 90mm | 1 |
| 42 | 87.01.590S | Extension 90mm for rear foot | 2 |
| 45 | 60.75.016P | Securing device for discharge pipe | 1 |
| 57 | 40.02.594P | Screwed cable gland PG 29 | 1 |

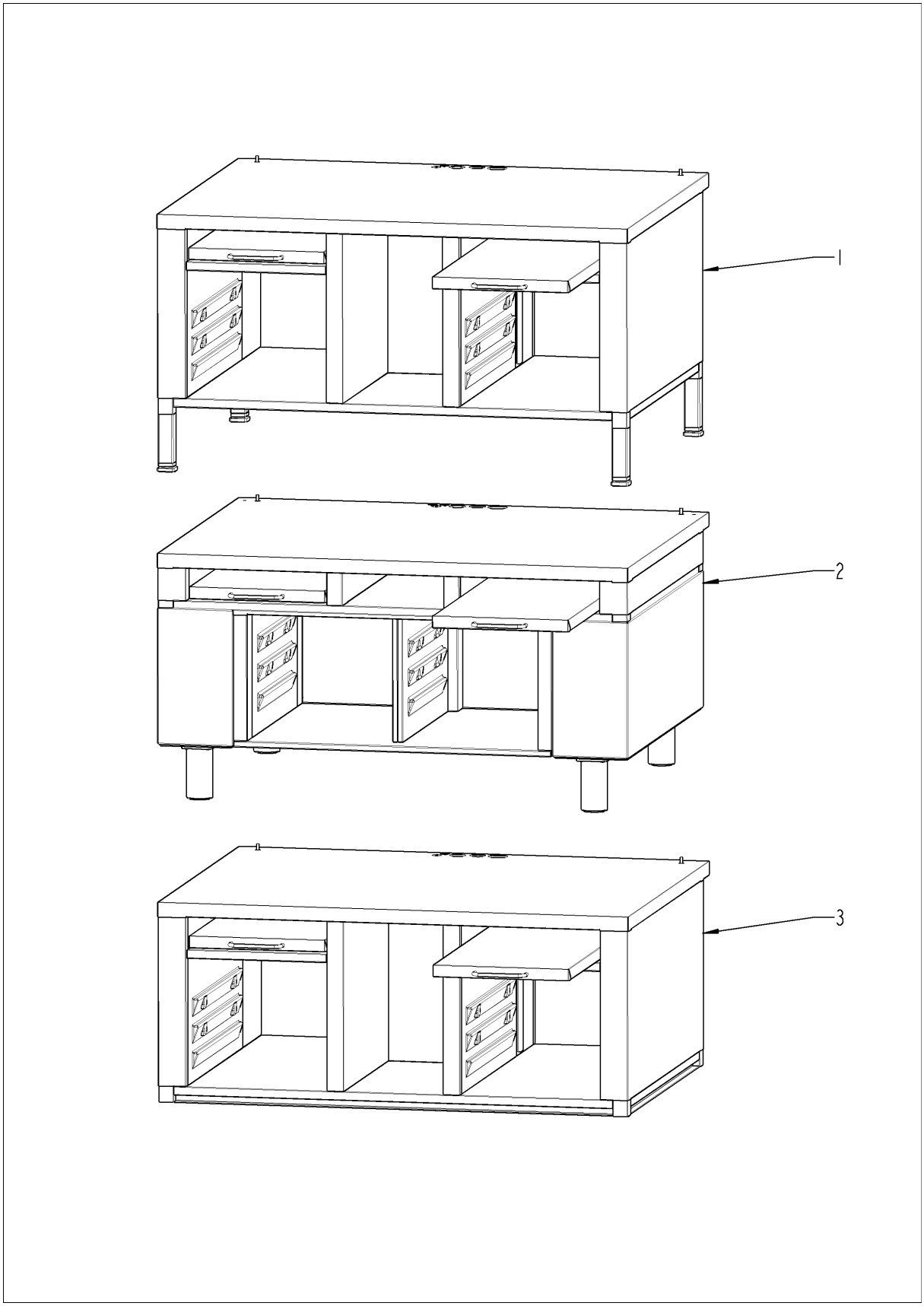
# Accessories



# 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 |
| 7 | | Oil cart | 1 |
| 8 | | VarioMobil | 1 |
| 9 | | Basket cart | 1 |

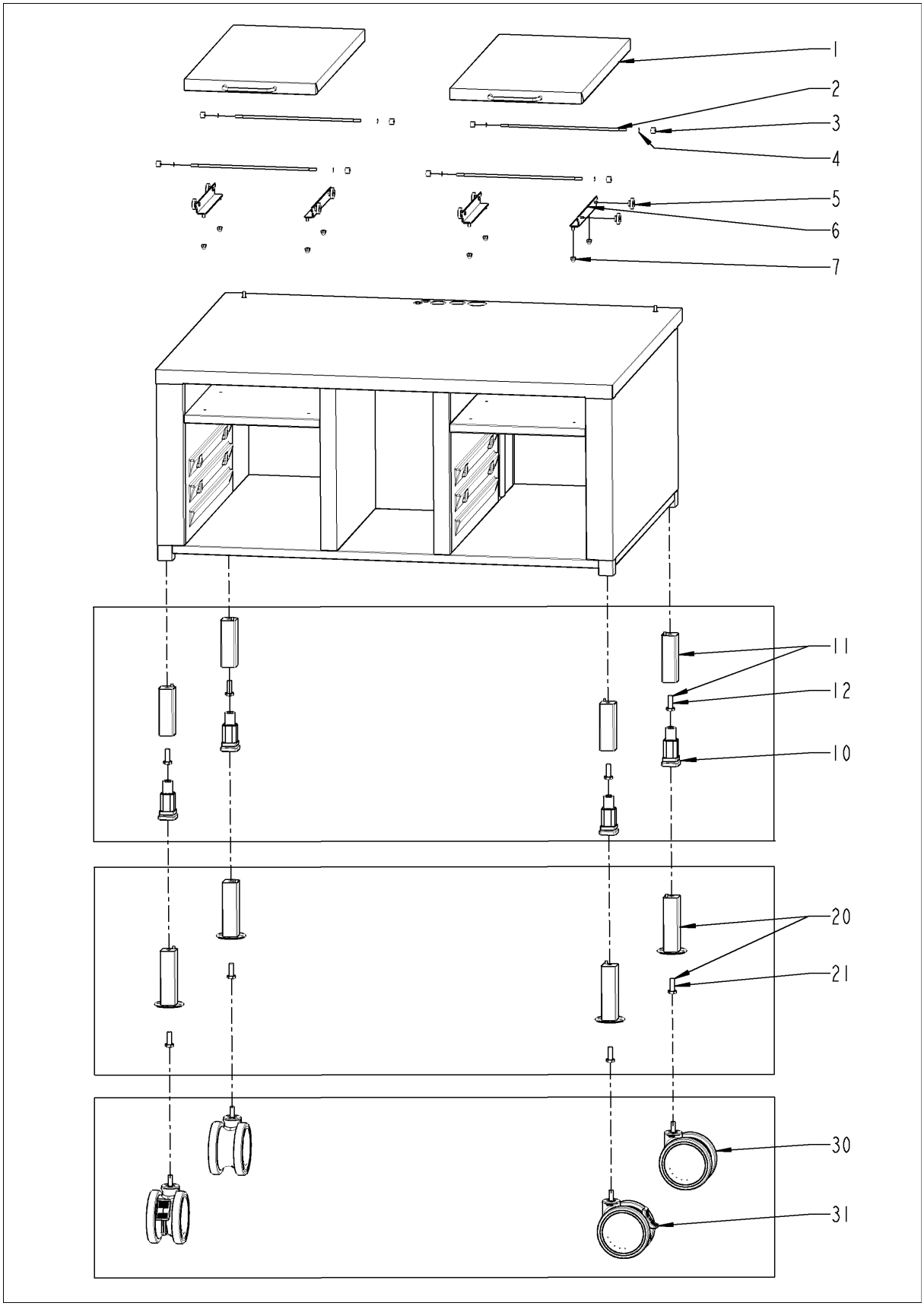
# Installation variants



# Installation variants

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | | Underframe | 1 |
| 2 | | Stand with electric height adjustment | 1 |

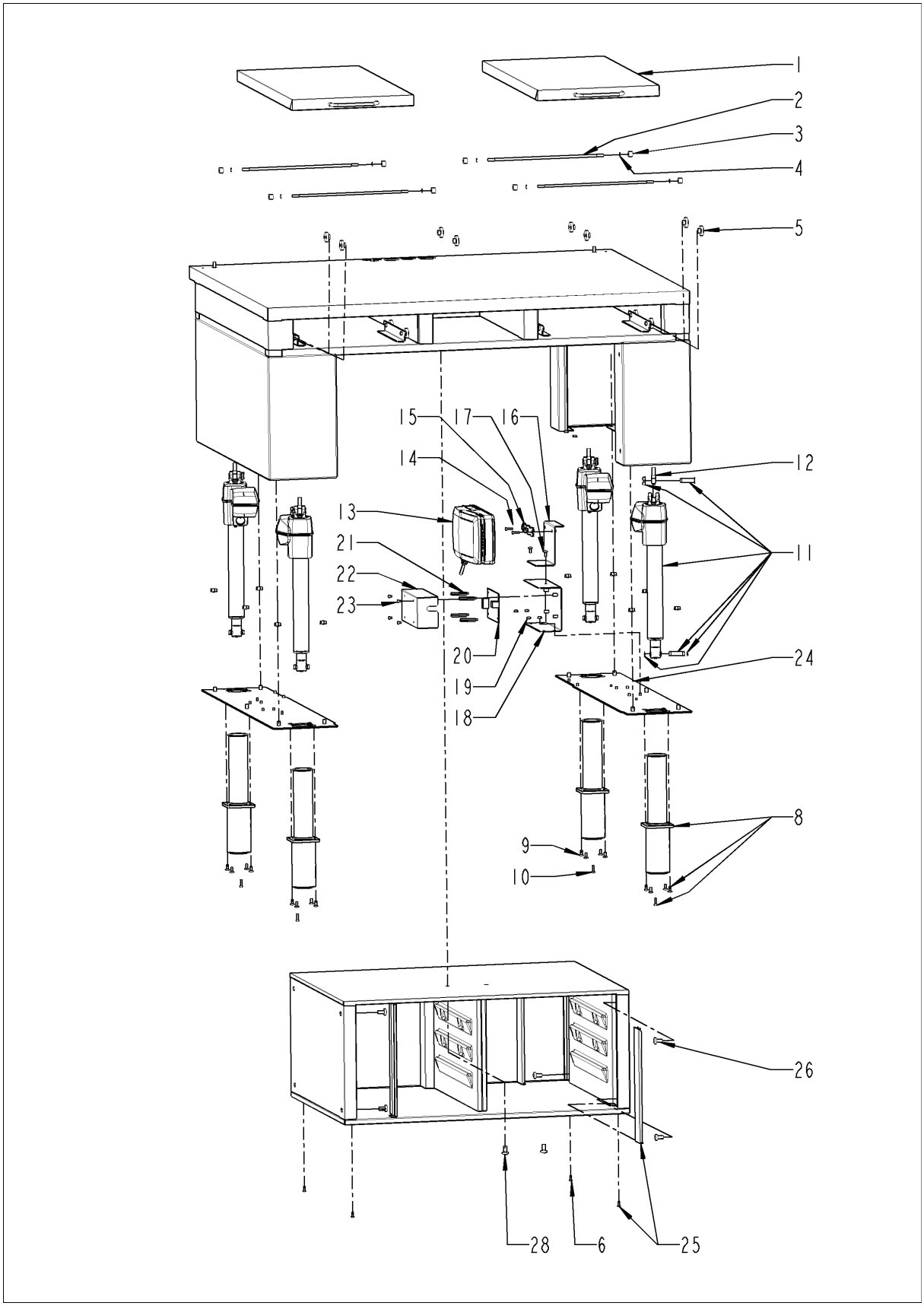
# Standard underframe



# Standard underframe

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 60.75.425P | Retractable shelf | 2 |
| 2 | 60.30.928P | Stop for retractable shelf | 4 |
| 3 | 2039.0326V | Spacer for pcb | 8 |
| 4 | 10.02.229P | Circlips Øint 5mm | 8 |
| 5 | 60.70.131P | Roller 25/6.5 HM5 stainless steel | 8 |
| 6 | 60.76.712P | Drawer rail | 4 |
| 7 | 1106.0360P | Cap nut M6, high shape | 8 |
| 10 | 12.01.290P | Adjustable foot | 4 |
| 11 | 60.75.429S | Plastic foot adaptor for substructure | 4 |
| 12 | 1010.0761P | Hex screw M10x30 | 4 |
| 20 | 60.31.542S | Stainless steel substructure foot | 4 |
| 21 | 1010.0761P | Hex screw M10x30 | 4 |
| 30 | 60.74.680P | Castor without brake ø125mm | 1 |
| 31 | 60.74.681P | Castor with brake ø125mm | 2 |

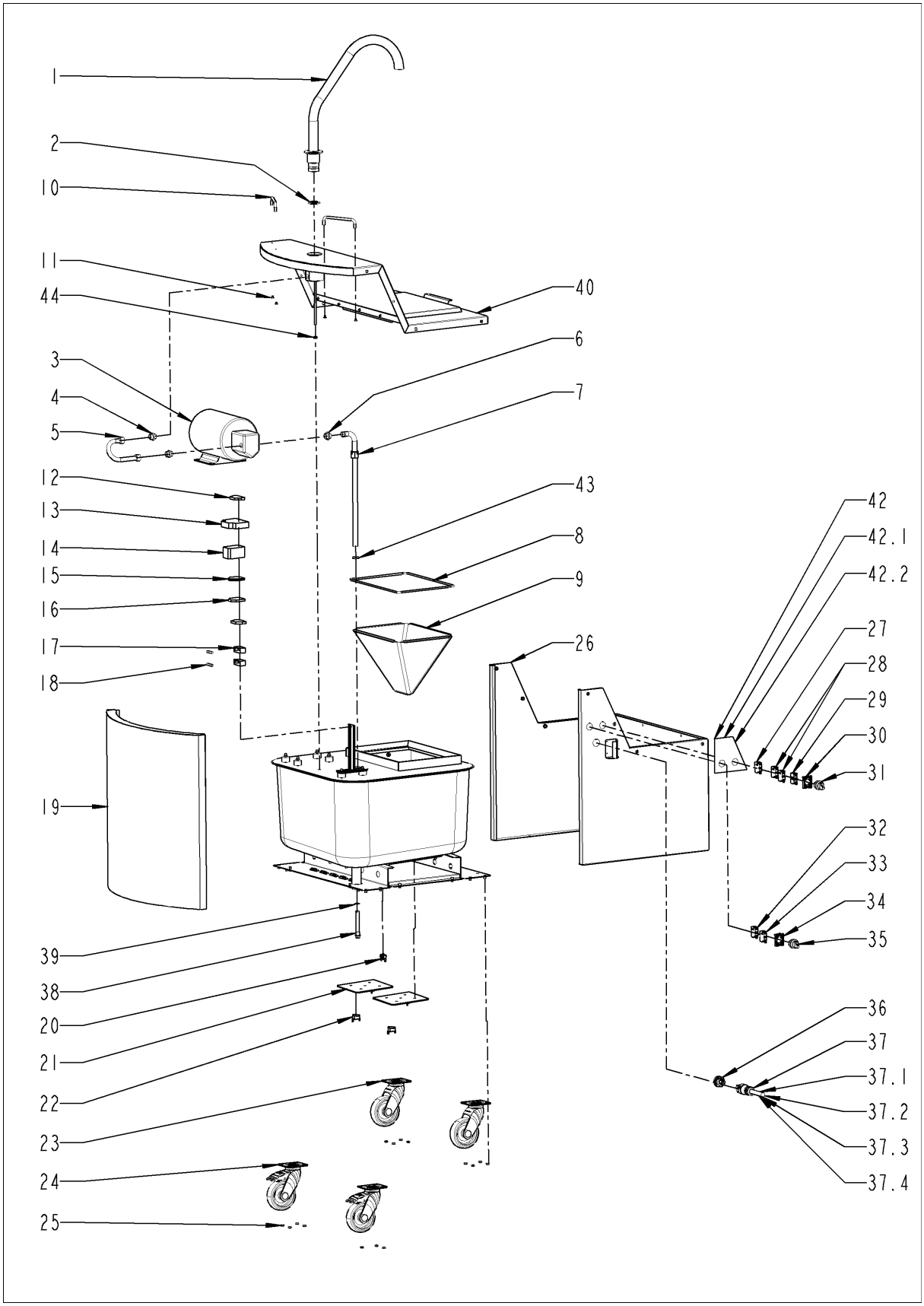
# Stand with electric height adjustment



# Stand with electric height adjustment

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 60.75.425P | Retractable shelf | 2 |
| 2 | 60.30.928P | Stop for retractable shelf | 4 |
| 3 | 2039.0326V | Spacer for pcb | 8 |
| 4 | 10.02.229P | Circlips Øint 5mm | 8 |
| 5 | 60.70.131P | Roller 25/6.5 HM5 stainless steel | 8 |
| 6 | 10.01.776P | Pan head screw Torx T20 M4x12 | 4 |
| 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 |
| 24 | 60.31.359P | Bottom plate for a height-adjustable substructure | 2 |
| 25 | 60.76.630S | Side hatch for substructure box | 4 |
| 26 | 10.01.616P | Pan head screw Torx T40 M8x16 | 8 |
| 28 | 10.01.616P | Pan head screw Torx T40 M8x16 | 2 |
| 30 | 54.02.056P | Flexible drain pipe DN50 | 1 |
| 100 | 40.06.499P | Power + bus cable for height-adjustable substructure | 1 |
| 101 | 40.07.161P | Bus cable extender W66 | 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 |

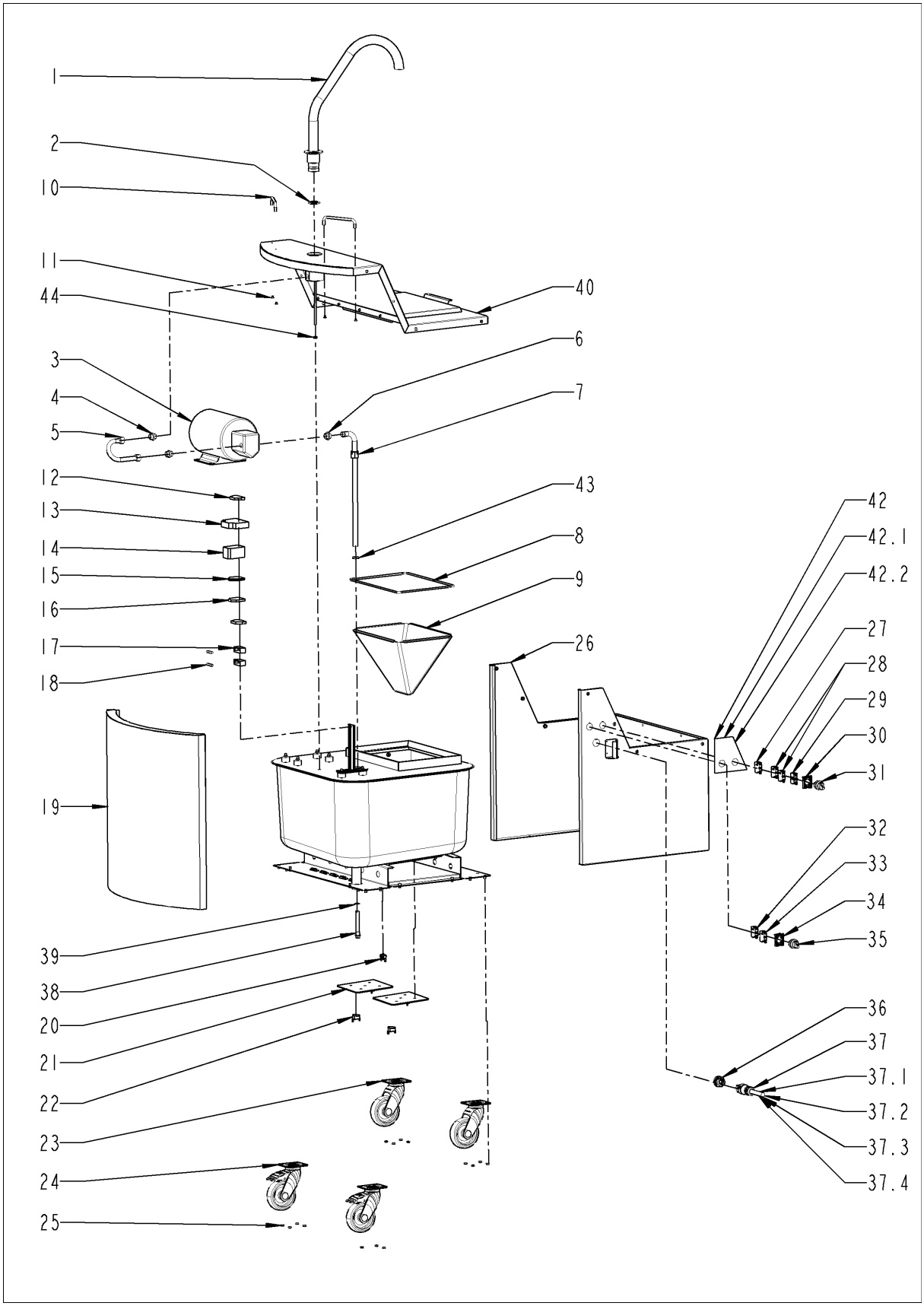
# Oil cart


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

# 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 |

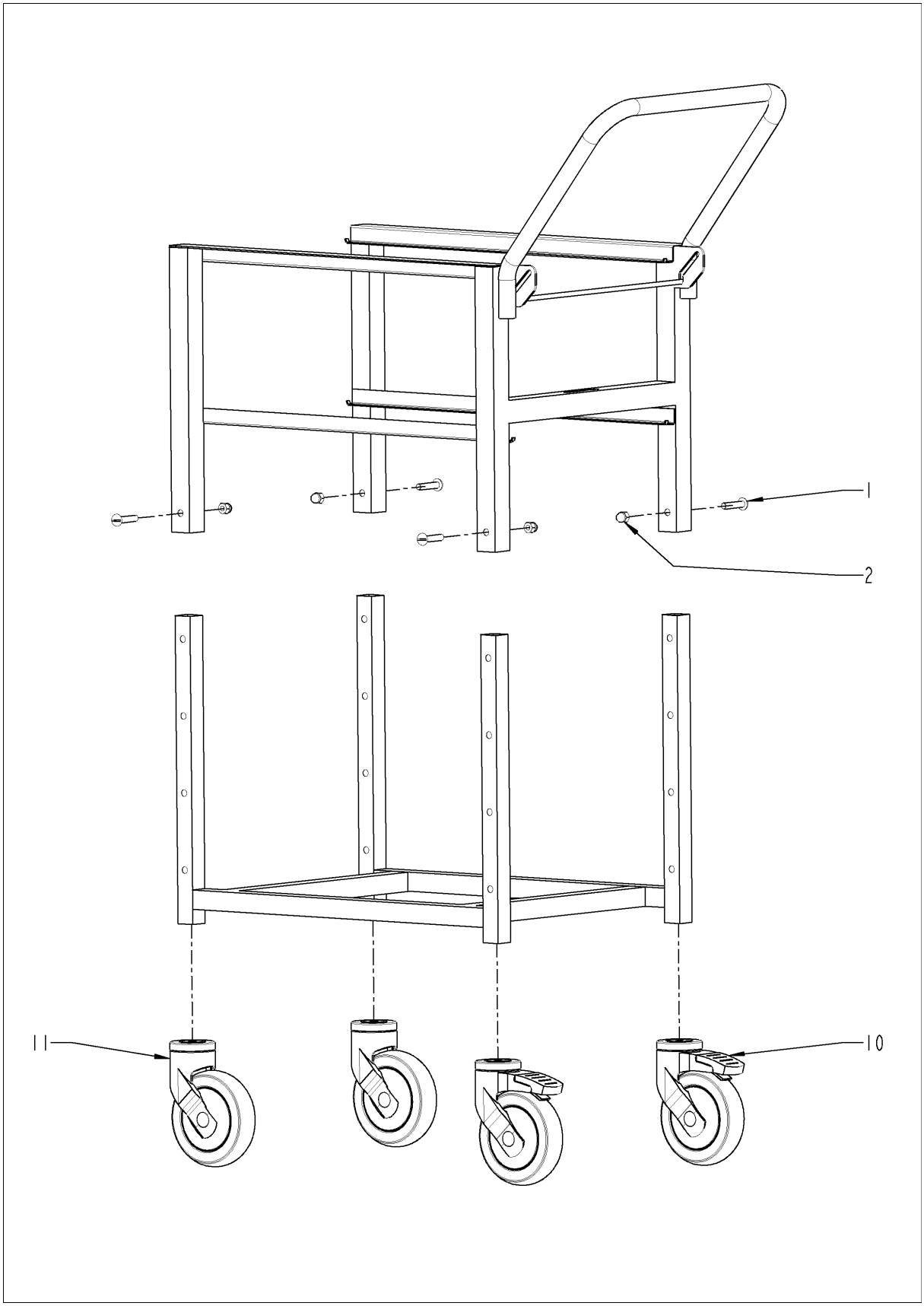
# Oil cart


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

# 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 |

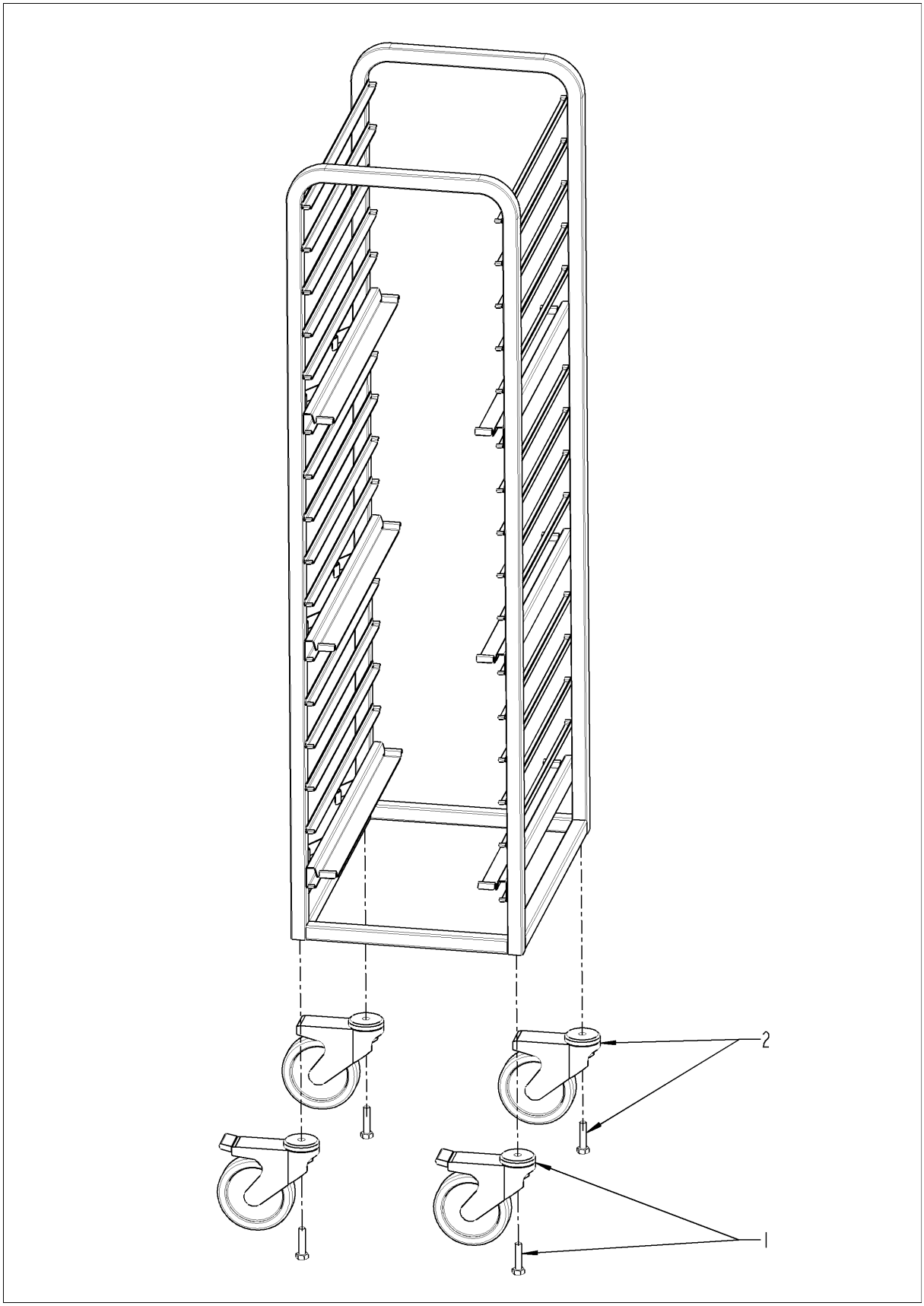
# VarioMobil



# VarioMobil

| Pos. | Part no. | Description | Qty. |
|---|---|---|---|
| 1 | 10.01.377P | Round head screw 8x38 | 4 |
| 2 | 10.00.175P | Cap nut M5 | 4 |
| 10 | 60.60.667S | Castor with brake ø125mm, screw M10 and M12 | 2 |
| 11 | 60.60.666S | Castor without brake ø125mm, screw M10 and M12 | 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 | 87.01.813S | Kit  connection to energy optimiser | 1 |
| 2 | 87.01.643S | 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 | 87.01.817S | Differential Switch-Adapter-Kit "Australia" | 1 |
| 6 | 87.01.819S | Differential Switch-Adapter-Kit | 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 |
|---|---|---|
| 50.02.337P | 3/4" gasket 3mm thick | 9 |
| 20.02.199S | Actuation for pan valve | 21 |
| 20.01.030S | Actuation for pan valve | 23 |
| 82.00.257 | Adaptator for contact element | 35 |
| 12.01.290P | Adjustable foot | 31 |
| 12.02.423S | Adjustable rear foot 45mm with locking clip | 25 |
| 50.02.319P | Aerator service key | 27 |
| 50.02.248S | Aerator with service key | 15 |
| 1004.0665F | Allen screw M4x6 | 35 |
| 52.00.017P | Angle plug PS3 6-6-90° | 9 |
| 24.04.882S | Axis Autolift | 17 |
| 82.00.260 | Blue Led indicator | 35 |
| 60.31.359P | Bottom plate for a height-adjustable substructure | 33 |
| 40.06.103P | Bus cable 0,7m | 5 |
| 40.07.161P | Bus cable extender W66 | 33 |
| 40.07.637P | Bus cable for A13 I/O board | 7 |
| 40.06.760P | Cable control pcb - capacitive switch | 5 |
| 40.06.569P | Cable CPU - TFT | 5 |
| 40.03.331P | Cable grommet Ø10 | 37 |
| 40.03.330P | Cable grommet Ø16 | 37 |
| 10.01.862P | Cage nut M5 for 1.7 up to 2.5mm | 5, 25 |
| 10.02.227P | Cap for T25 Torx screws | 25 |
| 10.00.175P | Cap nut M5 | 39 |
| 1106.0360P | Cap nut M6, high shape | 31 |
| 82.00.231 | Castor with brake | 35 |
| 60.74.681P | Castor with brake ø125mm | 31 |
| 60.60.667S | Castor with brake ø125mm, screw M10 and M12 | 39 |
| 60.71.146 | Castor with brake ø125mm, screw M12 | 41 |
| 82.00.230 | Castor without brake | 35 |
| 60.74.680P | Castor without brake ø125mm | 31 |
| 60.60.666S | Castor without brake ø125mm, screw M10 and M12 | 39 |
| 60.71.147 | Castor without brake ø125mm, screw M12 | 41 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 12.02.684P | Central cover for rear technical compartment | 25 |
| 12.02.979P | Chassis central | 25 |
| 10.02.229P | Circlips Øint 5mm | 31, 33 |
| 10.02.313P | Clamp 21,8-27 | 13 |
| 50.00.156P | Clamp f. hand shower roll guide | 9 |
| 20.03.324P | Clip of pan side panel | 21, 23 |
| 42.00.351P | CO61 module carrier | 33 |
| 10.01.851P | Collar nut M8 locking teeh | 17, 25 |
| 40.06.765P | Connection cable CO61 - RS232 converter | 33 |
| 87.01.615S | Connection pipe hand shower roll guide | 9 |
| 82.00.300 | Connector for socket-outlet | 37 |
| 16.03.859P | Console panelling | 11, 25 |
| 82.00.259 | Contact NC | 35 |
| 82.00.258 | Contact NO | 35 |
| 40.02.917 | Contactor 3TG1010-2AK2 | 35 |
| 40.07.420P | Contactor K3-18NBV10 190R T B01 AZ | 7 |
| 12.02.902P | Contactor support | 7 |
| 54.02.063P | Control chamber | 13 |
| 40.06.095P | Control harness | 7 |
| 87.00.618 | Control lever left of pan valve | 21 |
| 87.00.619 | Control lever right of pan valve | 23 |
| 87.01.822S | Control panel fixing repair kit | 43 |
| 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 | 21, 23 |
| 42.00.344P | Converter holder part 1 | 33 |
| 42.00.375P | Converter protection cover | 33 |
| 40.06.806S | Cooling fan | 7 |
| 10.01.923P | Counter head screw M5x45 DIN965-H | 11 |
| 10.02.080P | Countersunk screw DELTA PT 50*16 T+25 A2 | 25 |
| 24.04.711P | Cover for pressure connection | 15 |
| 12.02.159P | Cover left - right for rear technical compartment | 25 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 87.01.876S | CPU fan retro fit kit | 43 |
| 10.01.912P | Crosshead screw M5x12 | 25, 33 |
| 40.06.763P | Cylinder connection cable to CO61 module | 33 |
| 10.01.878P | Cylinder head screw torx M5x10 | 25 |
| 16.03.756P | Dial f. pulse generator | 5 |
| 87.01.819S | Differential Switch-Adapter-Kit | 43 |
| 87.01.817S | Differential Switch-Adapter-Kit "Australia" | 43 |
| 54.01.899P | Discharge pipe 2xØ22/Ø40 | 13 |
| 42.00.287P | Display *TFT* | 5 |
| 40.06.427P | Double level terminal block 10mm² blue | 7 |
| 40.04.643P | Double leven earth terminal 10mm² yellow/green | 7 |
| 50.02.064P | Double solenoid valve block with flowmeter | 9 |
| 54.01.997S | Drain hose | 13 |
| 60.99.244 | Drain plug gasket | 37 |
| 60.74.412 | Drain plug oil reserve | 37 |
| 60.76.712P | Drawer rail | 31 |
| W24001 | Dynamometric screwdriver 4Nm | 27 |
| 50.02.087P | Elbow fitting 3/4" M/F | 9 |
| 12.02.623P | Electric circuit board support | 25 |
| 42.00.322P | Electronic noice filter | 7 |
| 50.01.670P | Ellbow stainless 90° Ø22x1 | 13 |
| 40.07.120P | End flask for block APFN 6 D1/2/35 | 7 |
| 4001.1203P | End plate for mounting rail | 7 |
| 82.00.250 | End plate for mounting rail | 35 |
| 87.01.590S | Extension 90mm for rear foot | 25 |
| 82.00.289 | External panel | 35 |
| 60.74.853P | Eye socket with threaded shank M8x20 | 33 |
| 82.00.674P | Filling pipe for 100mm extension | 35 |
| 12.02.450P | Fixing device for Ethernet connector | 25 |
| 10.01.339P | Fixing Elastomer | 7 |
| 50.02.325P | Fixing nut 3/4" | 9 |
| 20.02.588S | Fixing plate lever pan | 17 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 54.02.056P | Flexible drain pipe DN50 | 33 |
| 82.00.291 | Flexible pipe 350mm for oil troley | 35 |
| 40.07.208P | Flowmeter cable | 9 |
| 60.75.807P | Foam support | 25 |
| 12.02.707P | Front foot 45mm | 25 |
| 87.01.591S | Front foot 90mm | 25 |
| 16.03.791P | Front panel console | 11 |
| 16.03.878P | Front panel cover for USB assembly | 11 |
| 4001.0226V | Fuse 6.35x32mm 16A, time-lag | 35 |
| 82.00.251 | Fuse holder | 35 |
| 50.02.351P | Gasket 26.8x38.8x3mm | 9 |
| 20.00.992P | Gasket for plug pan valve | 21, 23 |
| 12.02.434P | Gasket for rear technical compartment cover | 25 |
| 87.01.774S | Gasket kit for control panel cable | 5 |
| 20.01.518P | Graphit plate for safety temperature limiter | 21, 23 |
| 87.01.833S | Hand shower removal kit | 43 |
| 52.00.127S | Hand shower black | 9 |
| 52.00.085P | Hand shower roll guide | 9 |
| 52.00.094P | Hand shower roll guide water supply | 9 |
| 2610.400279F | Handle | 35 |
| 40.06.028P | Heat sink 1 SSR | 7 |
| 82.00.268 | Hex nipple M3/8"-F1/4" | 35 |
| 1105.0121V | Hex combination nut M5 galv | 35 |
| 82.00.243 | Hex double nipple G 3/8" | 35 |
| 1010.0761P | Hex screw M10x30 | 31 |
| 10.01.808P | Hex socket countersunk head screw M5x16 | 21, 23 |
| 10.01.479P | Hex socket set screw cup point A2 M8x35 Tuflok | 17 |
| 10.01.054P | Hexagonal nut with notched flange M5 | 13, 25, 33 |
| 10.02.121P | Hexagonal spacer M4x40 | 33 |
| 42.00.342P | Holder for module CO61 | 33 |
| 10.02.239P | Hose clamp clic R86-145 | 9 |
| 10.01.446P | Hose clamp clic R96-300 | 13 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 10.02.238P | Hose clamp clic R96-315 | 13 |
| 2066.0522P | Hose clamp ø 31,3 mm | 13 |
| 87.01.907S | Hose repair kit D10mm | 43 |
| 42.00.413P | I/O movement PCB A13 | 7 |
| 16.04.064P | Inner protective cover of the control panel | 5 |
| 12.02.769P | Installation rail for Contactor Din 46277 | 7 |
| 82.00.617 | Insulation set for oil cart | 37 |
| 40.06.732P | Interface cable LAN 2,3m | 7 |
| 40.06.583P | Interface cable USB 1,4m | 5, 11 |
| 24.04.307P | Jack gas 900N | 17 |
| 87.01.813S | Kit connection to energy optimiser | 43 |
| 82.00.247 | Kit filling pipe | 35 |
| 82.00.265 | Kit heating element | 35 |
| 87.01.775S | Kit pan left without pressure | 21 |
| 87.01.776S | Kit pan right without pressure | 23 |
| 82.00.235 | Kit pump | 35 |
| 82.00.261 | Klixon 240° | 35 |
| 20.03.563P | Left pan front panel | 21 |
| 20.02.937S | Left pan shaft | 17 |
| 24.04.424S | Lid bearing with sealing ring | 17 |
| 60.71.704 | Lid complete oil cart | 37 |
| 24.04.951P | Lid gasket | 15 |
| 24.04.293P | Lid left | 15 |
| 24.04.292P | Lid right | 15 |
| 24.03.808S | Lift arm for lid left | 17 |
| 24.04.148S | Lift arm for lid right | 17 |
| 20.02.872S | Lift arm for pan | 17 |
| 87.01.759S | Lifting cylinder for height adjustable substructure | 33 |
| 20.03.678P | Lifting cylinder for pan and lid | 17 |
| 54.01.935P | Lip seal D40 | 13 |
| 54.02.053P | Locking ring | 13 |
| 40.06.076P | Loudspeaker cable | 5 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 40.06.728P | Loudspeaker K 64 WPTR | 5 |
| 87.01.875S | Loudspeaker kit SL70 8W | 43 |
| 24.02.804P | Magnet 22x10mm | 11 |
| 40.07.165S | Meat probe sensor | 15 |
| 40.07.164S | Meat probe sensor, right lid | 15 |
| 87.01.758 | Memory-Stick USB iVario | 27 |
| 42.00.359P | Micro SD card | 5 |
| 40.06.709P | Micro switch bundle lid up S10/S12 X150 | 7 |
| 40.06.710P | Micro switch bundle lifting cylinder left S23/S24 X138 | 7 |
| 40.06.711P | Micro switch bundle lifting cylinder right S29/S30 X138 | 7 |
| 40.04.656P | Micro switch NC, NO with strip | 7, 17 |
| 40.05.712P | Micro switch pan valve position | 21, 23 |
| 42.00.305S | Module CO61 | 33 |
| 20.03.265P | Mounting angle for pan panel | 21, 23 |
| 82.00.240 | O-ring 34x3 | 35 |
| 10.00.675P | O-ring f. pan valve 17.3 x 2.4 | 21, 23 |
| 40.02.405P | Obturator of socket-outlet | 11 |
| 60.71.599 | Oil filter | 35 |
| 16.04.204S | On-Off sensor support | 5 |
| 1008.0768P | Ornamental screw M8x16 | 17 |
| 12.02.157P | Outer bearing for lid left | 25 |
| 12.02.397P | Outer bearing for lid right | 25 |
| 82.00.363 | Overlay FRIMA oil cart | 37 |
| 82.00.234 | Overlay OEM oil cart | 37 |
| 60.74.940 | Overlay RATIONAL oil cart | 37 |
| 54.01.996S | Pan drain pipe | 13 |
| 10.01.842P | Pan head screw Torx Ejot PT WA5463 60x1,8x18 | 25 |
| 10.01.778P | Pan head screw Torx M4x16 | 33 |
| 10.01.615P | Pan head screw Torx M5x16 | 11 |
| 10.01.776P | Pan head screw Torx T20 M4x12 | 33 |
| 10.00.061P | Pan head screw Torx T20 M4x12 | 33 |
| 10.01.616P | Pan head screw Torx T40 M8x16 | 17, 25, 33 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 20.03.472P | Pan insulation | 21, 23 |
| 20.03.248S | Pan shaft right | 17 |
| 20.02.168P | Pan valve cable | 21, 23 |
| 60.75.429S | Plastic foot adaptor for substructure | 31 |
| 10.01.336P | Plastic spacer 7mm 12 | 7 |
| 54.02.012P | Plug D7x10mm | 25 |
| 20.01.712S | Plug for pan valve with gasket | 21, 23 |
| 50.00.085P | Plug-in spring f. hand shower roll guide | 9 |
| 87.01.821S | Potential free contact adapter kit | 43 |
| 40.06.499P | Power + bus cable for height-adjustable substructure | 33 |
| 40.05.944P | Power harness heating element pan left | 21 |
| 40.05.945P | Power harness heating element pan right | 23 |
| 40.06.712P | Power supply | 7 |
| 12.02.847P | Power supply support | 7 |
| 10.01.906P | Printed circuit board holder, clip-on H=6mm | 7 |
| 12.02.408P | Protection for lid outer bearing | 25 |
| 40.00.404P | Pulse generator | 5 |
| 10.02.263P | Raised countersunk head screw Torx M4x10 T20 | 7 |
| 12.02.088P | Rear technical compartment | 25 |
| 16.03.552P | Rear technical compartment cladding | 25 |
| 87.01.860S | Relay-I/O pcb A10 | 7 |
| 87.01.783S | Repair kit for technical box thread | 43 |
| 60.75.425P | Retractable shelf | 31, 33 |
| 87.01.643S | Retrofit kit interface Ethernet | 43 |
| 87.01.848S | Retrofit kit lockable control panel RATIONAL | 43 |
| 20.03.565P | Right pan front panel | 23 |
| 60.70.131P | Roller 25/6.5 HM5 stainless steel | 31, 33 |
| 10.01.377P | Round head screw 8x38 | 39 |
| 82.00.288 | Round panel | 35 |
| 42.00.352P | RS232 converter for adjustable height | 33 |
| 40.04.501P | Safety temperature limiter 130° | 21, 23 |
| 40.04.512P | Safety temperature limiter 205°C | 21, 23 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 40.02.337 | Safety temperature limiter 215°C | 35 |
| 40.04.370P | Safety temperature limiter heating element | 21, 23 |
| 40.02.594P | Screwed cable gland PG 29 | 7, 25 |
| 20.02.940P | Sealing ring for pan shaft | 17 |
| 60.75.016P | Securing device for discharge pipe | 25 |
| 82.00.255 | Selector 2 positions lighted | 35 |
| 82.00.256 | Selector 3 positions spring return | 35 |
| 42.00.346P | Sensor on / off | 5 |
| 20.02.130S | Shaft jack | 17 |
| 24.04.155S | Shaft jack D8 with staple pin | 17 |
| 20.00.905S | Sheath for pan valve | 21, 23 |
| 40.06.762P | Short power supply cable height adjustable cylinder | 33 |
| 16.04.236P | Shutter sticker option without differential protection | 11 |
| 60.76.630S | Side hatch for substructure box | 33 |
| 20.02.943P | Side panel left of pan left | 21 |
| 20.02.949P | Side panel left of pan right | 23 |
| 20.02.935P | Side panel right for pan left | 21 |
| 20.02.950P | Side panel right of pan right | 23 |
| 12.02.643P | Slides linkage | 25 |
| 10.01.669P | Slot counter head secur screw M5X20 Phillips | 11, 25 |
| 10.00.144P | Socket cap screw M3x16mm | 7 |
| 16.03.997P | Socket flap | 11 |
| 40.05.670P | Solid state relais | 7 |
| 2039.0326V | Spacer for pcb | 31, 33 |
| 12.02.472P | Spacer for rear technical compartment | 25 |
| 20.01.508P | Spacer for safety temperature limiter | 21, 23 |
| 10.01.907P | Spacer Ø int = 3,2mm, H = 6mm | 7 |
| 40.04.522 | Spiral cable AUS | 37 |
| 40.04.520 | Spiral cable CH | 37 |
| 40.04.521 | Spiral cable DK | 37 |
| 40.04.518 | Spiral cable FR/DE | 37 |
| 40.04.519 | Spiral cable UK | 37 |

# Index


| Part no. | Description | Page |
|---|---|---|
| 60.31.542S | Stainless steel substructure foot | 31 |
| 60.30.928P | Stop for retractable shelf | 31, 33 |
| 82.00.246 | Suction pipe complete | 35 |
| 60.71.850 | Support of oil filter | 35 |
| 60.74.713S | Telescopic foot | 33 |
| 82.00.248 | Terminal block 4mm² | 35 |
| 82.00.249 | Terminal block 4mm² blue | 35 |
| 40.06.252P | Termination resistor | 7 |
| 87.00.339 | Thermocouple for heating element | 21, 23 |
| 40.05.931P | Thermocouple harness left and right | 21, 23 |
| 40.06.857S | Thermocouple pan left | 21 |
| 40.06.858S | Thermocouple pan right | 23 |
| 82.00.254 | Timing relay | 35 |
| 40.06.045P | USB socket cover | 11 |
| 20.03.466P | V-profile gasket | 21, 23 |
| 1900.0202P | Water filter | 9 |

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