

# AR100 VL-1S



## Spare parts manual

Valid from machine number:  
**100002125**

# Varimixer

EN

Varimixer A/S  
Elementfabrikken 9  
DK-2605 Brøndby  
Denmark

P: +45 4344 2288  
E: [info@varimixer.com](mailto:info@varimixer.com)  
[www.varimixer.com](http://www.varimixer.com)

DRN: 24100-1402  
2022 11 09

<b>SPEED REGULATION.....</b>	<b>3</b>
<b>TRANSMISSION .....</b>	<b>4</b>
<b>PLANETARY HEAD .....</b>	<b>6</b>
<b>MACHINE COLUMN.....</b>	<b>8</b>
<b>SAFETY GUARD.....</b>	<b>10</b>
<b>LIFTING SYSTEM .....</b>	<b>12</b>
<b>ATTACHMENT DRIVE.....</b>	<b>14</b>
<b>MICROSWITCHES .....</b>	<b>16</b>
<b>CABLES.....</b>	<b>17</b>
<b>ELECTRIC COMPONENTS.....</b>	<b>18</b>
<b>FRONT PANEL ASSEMBLY.....</b>	<b>20</b>
<b>BOWLS AND MIXING TOOLS .....</b>	<b>22</b>

## ORDERING OF SPARE PARTS:

Sales of spare parts for our mixers, are handled in our sales and service department. When ordering spare parts, the following information must be provided:

- 1. Type of machine.**
- 2. Number of the machine.**
- 3. Article number of the spare part in question. (Order no.)**
- 4. Method of conveyance.**

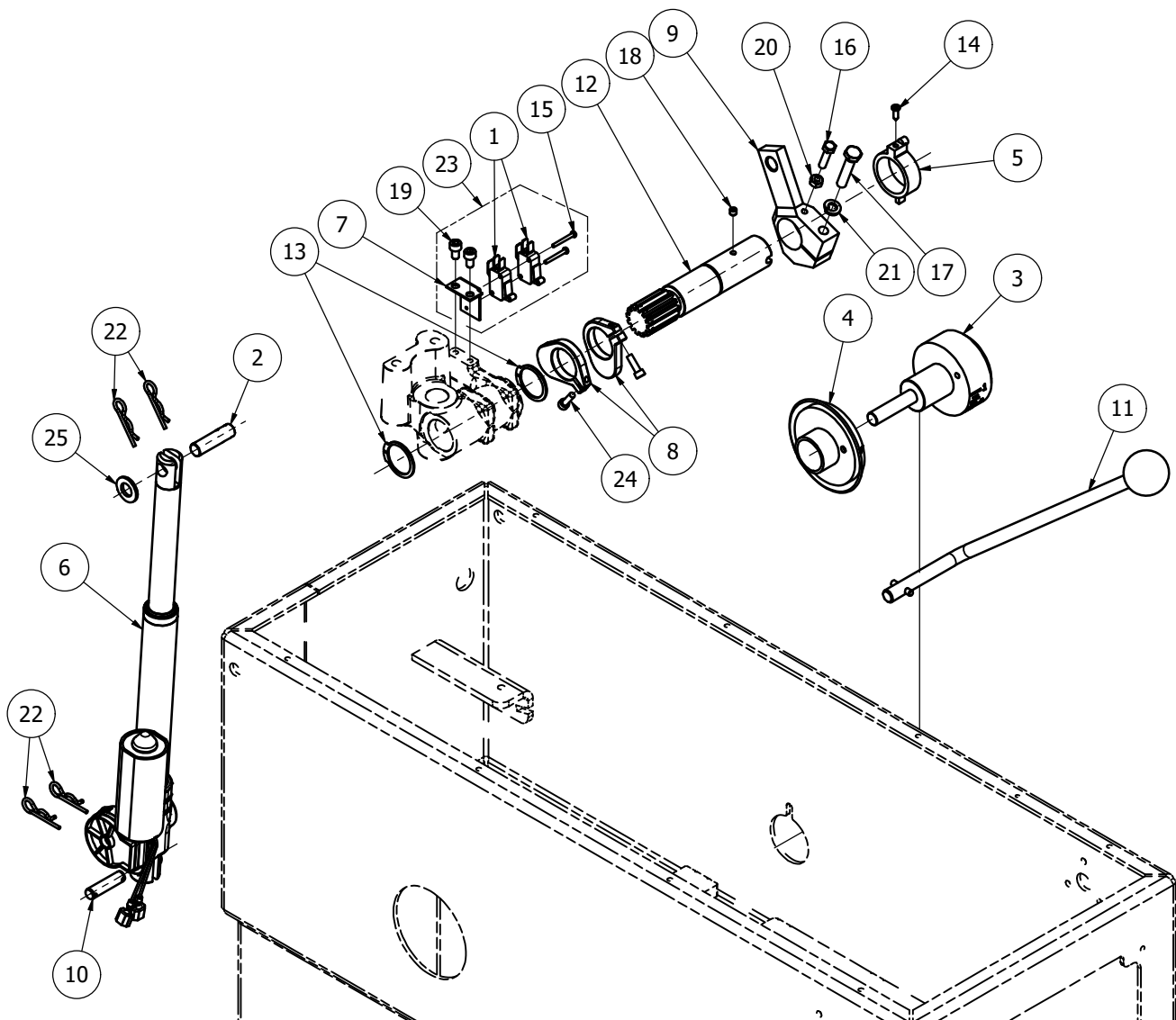
If one of the above pieces of information is missing, please contact our sales and service department before placing the order, as then we can assist you in finding the correct article number (**order no.**) of the spare part in question.

A few spare parts are not sold alone, in such cases reference is made at the pos.number to the assembly number to be used for ordering. The assembly numbers are shown on the relevant pages.

Returning of spare parts is only allowed when agreed with:

**Varimixer A/S**

FIG NO.	ORDER NO.	DESCRIPTION
1 .....	56SN20-30 .....	Microswitch
2 .....	AR31-519.4 .....	Pin
3 .....	AR60-318.1M .....	Cap with scale
4 .....	AR30-47.10 .....	Disc with arrow
5 .....	AR30-47.11 .....	Clamp, speed indicator
6 .....	AR30-517 .....	Actuator
7 .....	AR61-520.11 .....	Bracket, limit switch
8 .....	AR31-520.3 .....	Limit switch, cam washer
9 .....	AR60-543E .....	Servo arm
10 .....	AR81-86.41 .....	Pin
11 .....	R20-47.1M .....	Speed selector lever
12 .....	R60E-47.1 .....	Change over shaft
13 .....	STA3414 .....	Circlip
14 .....	STA5247 .....	Screw
15 .....	STA5254 .....	Self tapping Screw
16 .....	STA5434 .....	Screw
17 .....	STA5436 .....	Screw
18 .....	STA5607 .....	Screw
19 .....	STA5619 .....	Screw
20 .....	STA5819 .....	Nut
21 .....	STA6056 .....	Lock washer
22 .....	STA6205 .....	Cotter pin
23 .....	AR61-520.11M .....	Limit switch, assembly
24 .....	STA5712 .....	Screw
25 .....	STA6011 .....	Washer

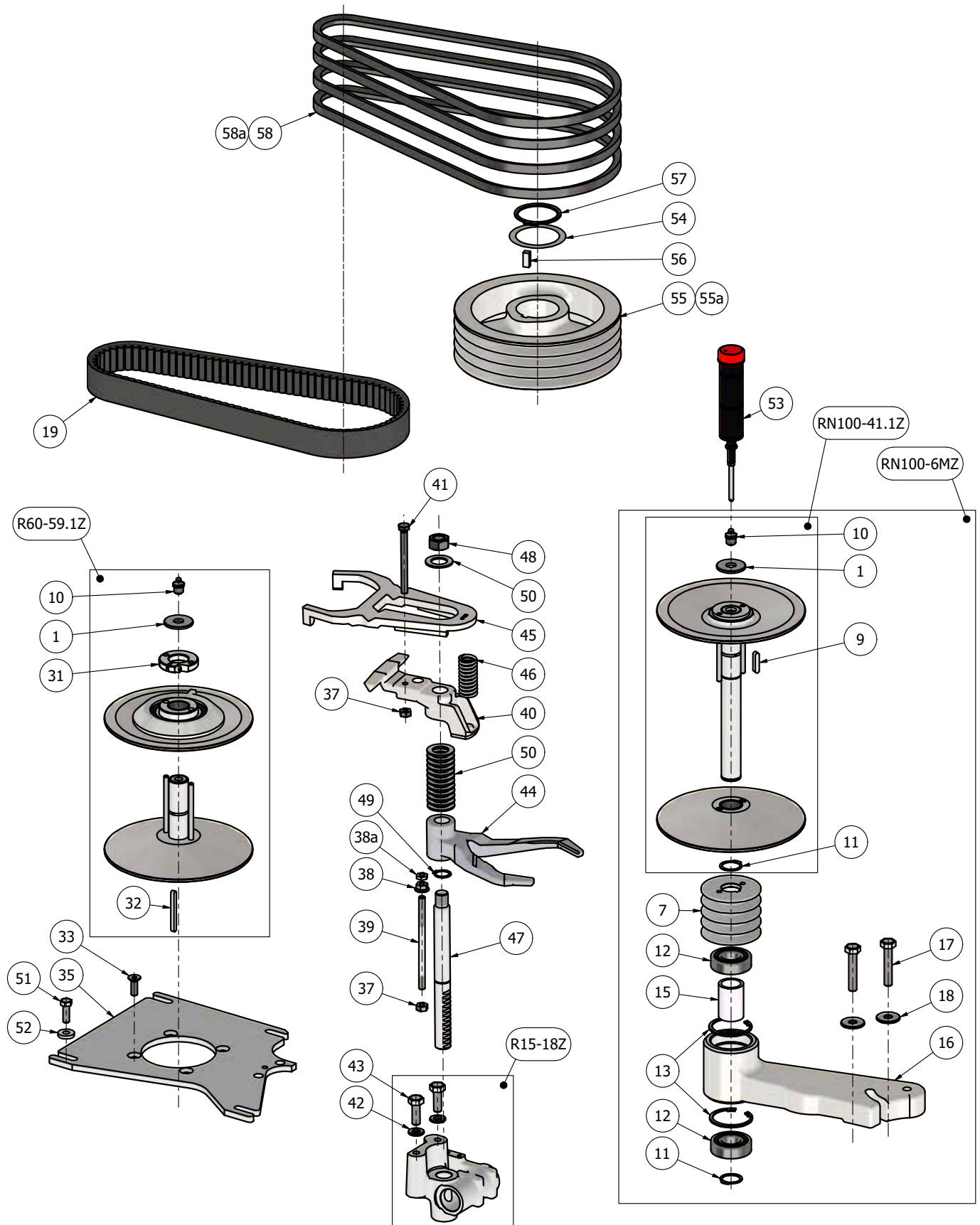


## TRANSMISSION

FIG NO.	ORDER NO.	DESCRIPTION
1 .....	STA6018 .....	Washer
7 .....	RN100-128 .....	Pulley small
9 .....	STA2024 .....	Feather Key
10 .....	STA3220 .....	Grease nipple
11 .....	STA3410 .....	Circlip
12 .....	6205 2RS .....	Ball bearing
13 .....	STA3514 .....	Circlip
15 .....	RN100-143 .....	Distance bushing
16 .....	RN100-6 .....	Bearing arm
17 .....	STA5348 .....	Hex cap screw
18 .....	STA6033 .....	Washer
19 .....	R60-91 .....	V-belt
31 .....	R27-227Z .....	Clamping ring
32 .....	STA2011 .....	Feather Key
33 .....	STA5018 .....	countersunk head screw
35 .....	R60-61.1E .....	Base for motor
36 .....	R15-18Z .....	Bearing bracket
37 .....	STA5810 .....	Hex Nut
38 .....	STA5895 .....	Hex flange nut
38a .....	STA5812 .....	Hex Nut
39 .....	AR81-305 .....	Stud bolt
40 .....	R20-26.1 .....	Support bracket for belt
41 .....	STA5446 .....	Hex cap screw
42 .....	STA6026 .....	Washer
43 .....	STA5345 .....	Hex cap screw
44 .....	R27-16 .....	Fork for belt tightener, lower
45 .....	R20-19 .....	Fork for belt tightener
46 .....	W40P-275 .....	Compression spring
47 .....	R15-46Z .....	Toothed rack shaft
48 .....	STA5815 .....	Hex Nut
49 .....	STA3407 .....	Circlip
50 .....	STA6040 .....	Washer
51 .....	STA5433 .....	Hex cap screw
52 .....	STA6034 .....	Washer
53 .....	R15-142-USPUL .....	Grease gun
54 .....	STA6048 .....	Washer
55 .....	*1) .. RN100-129 .....	Belt pulley
55a .....	*2) .. RN100-129A .....	
56 .....	STA2030 .....	Feather Key
57 .....	STA3419 .....	Circlip
58 .....	*1) .. RN100-90Z .....	V-belt
58a .....	*2) .. RN100-90.1Z .....	

..... \*1) .. 50 Hz power supply

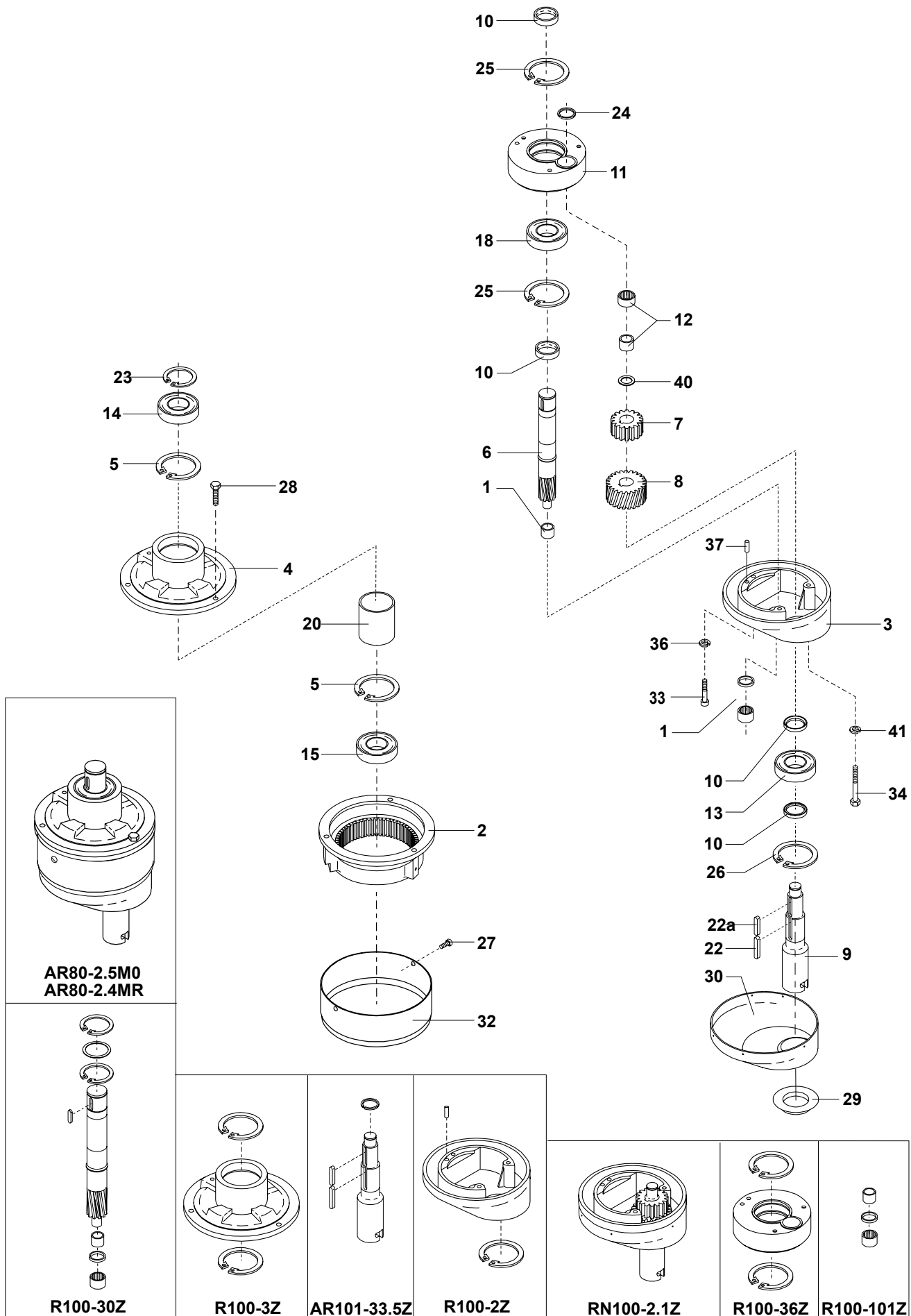
..... \*2) .. 60 Hz power supply



R60-59.1Z ..... Motor pulley, assembly  
 RN100-6MZ ..... Pulley bearing arm, assembly  
 RN100-41.1Z ..... Pulley assembly  
 R15-18Z ..... Bearing bracket, assembly

## PLANETARY HEAD

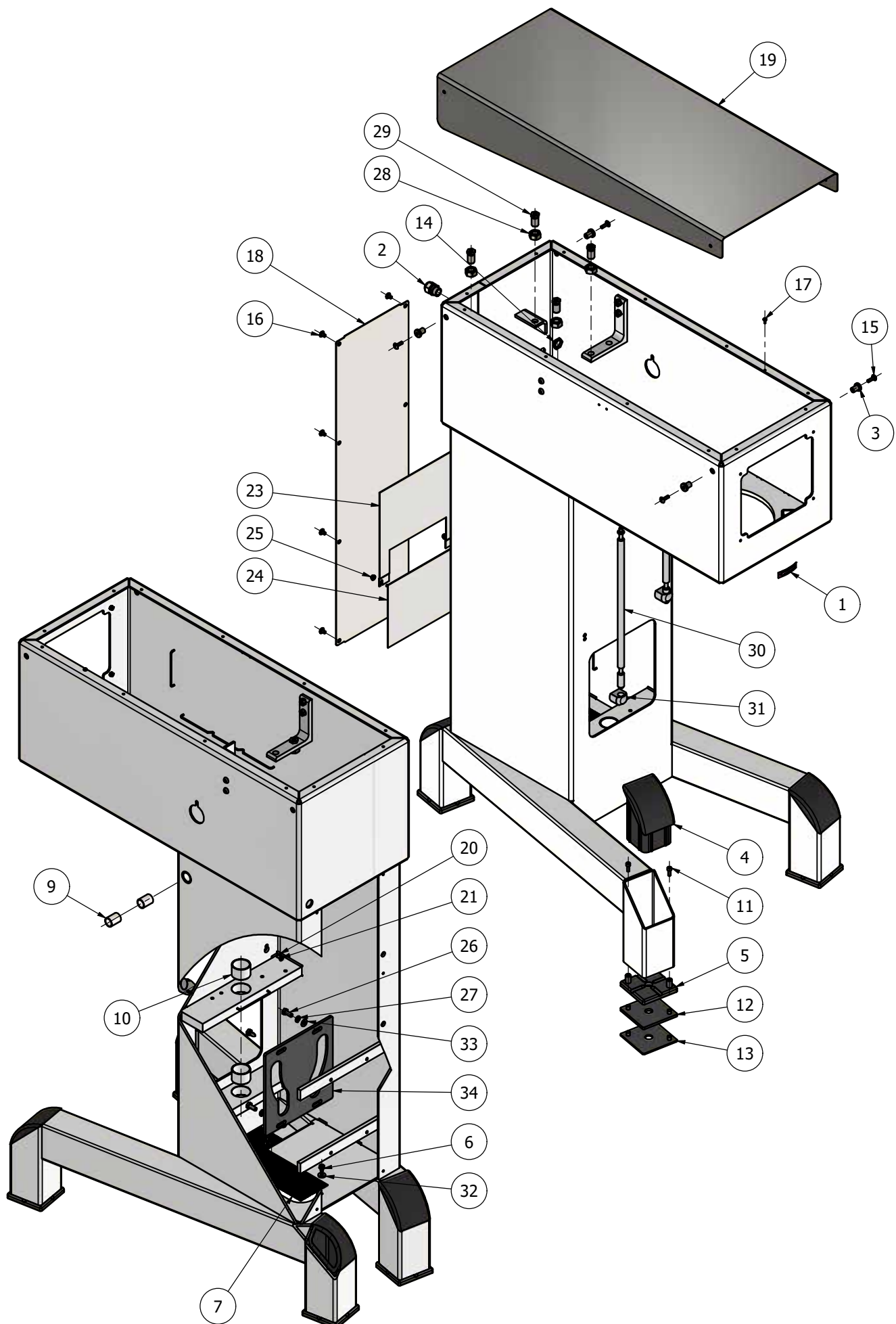
FIG NO.	ORDER NO.	DESCRIPTION
.....	*1) .. AR80-2.5M0.....	Planetary head, assembly
.....	*3) .. AR80-2.4MR.....	
.....		
1 .....	R100-101Z.....	Needle bearing, kit
2 .....	*1) .. R100-1 .....	Gear wheel rim
.....	*3) .. R100-1M5.....	
3 .....	*1) .. R100-2Z.....	Eccentric head, kit
.....	*3) .. R100-2M5.....	
4 .....	*1) .. R100-3Z.....	Main bearing, kit
.....	*3) .. R100-3M5.....	
5 .....	STA3532 .....	Circlip
6 .....	R100-30 .....	Main shaft
7 .....	AR140-31.....	Rim pinion
8 .....	R100-32.1 .....	Rim pinion, lower
9 .....	AR101-33.5.....	Bayonet shaft
10 .....	R100-37 .....	Distance piece
11 .....	R100-36.....	Eccentric disc
12 .....	R100-96.....	Needle bearing
13 .....	R100-97 .....	Ball bearing
14 .....	R100-98 .....	Ball bearing
15 .....	R100-99 .....	Ball bearing
18 .....	R100-100 .....	Ball bearing
20 .....	R100-141 .....	Distance tube
22 .....	STA2039 .....	Feather Key
22a .....	STA2034 .....	Feather Key
23 .....	STA3419 .....	Circlip
24 .....	STA3478 .....	Circlip
25 .....	STA3530 .....	Circlip
27 .....	*1) .. STA5263 .....	Screw
.....	*3) .. STA9003 .....	
28 .....	STA5333 .....	Screw
29 .....	R100-209 .....	Seal ring
30 .....	W100-272 .....	Cap, planetary head
32 .....	AR80-162H .....	Plastic cap
33 .....	STA5644 .....	Screw
34 .....	STA5652 .....	Screw
36 .....	STA6057 .....	Lock washer
37 .....	STA6460 .....	Grooved pin
40 .....	R100-235 .....	Washer
41 .....	STA6029 .....	Washer
.....		
.....	*1) .. Standard version.....	
.....	*3) .. Stainless steel frame version	
.....		
.....	R100-30Z .....	Main shaft, kit
*1).....	R100-3Z .....	Main bearing, kit
.....	AR101-33.5Z.....	Bayonet shaft, kit
*1).....	R100-2Z .....	Eccentric head, kit
*1).....	RN100-2.1Z .....	Eccentric head mounted
.....	R100-36Z .....	Eccentric disc, kit
.....	R100-101Z .....	Needle bearing, kit



**MACHINE COLUMN**

<b>FIG NO.</b>	<b>ORDER NO.</b>	<b>DESCRIPTION</b>
1 .....	R15-245 .....	Arrow sign
2 .....	STA3002 .....	Cable gland
3 .....	STA6580 .....	Threaded bushing
4 .....	AR80-212 .....	Blanking plug
5 .....	AR80-213 .....	Base plate
6 .....	STA5045 .....	Screw
7 .....	AR31-22.180 .....	Grate
9 .....	STA2515 .....	Bearing bushing
10 .....	STA2526 .....	Bearing bushing
11 .....	STA5615 .....	Socket head screw
12 .....	AR80-214.6 .....	Adjustment plate, 3mm
13 .....	AR80-214.3 .....	Adjustment plate, 6mm
14 .....	STA3014 .....	Cable gland nut
15 .....	STA5017 .....	Screw
16 .....	STA5080 .....	Screw
17 .....	STA5232 .....	Self tapping Screw
18 .....	AR101-22.17R .....	Cover plate
19 .....	AR101P-21 .....	Top cover
20 .....	STA5724 .....	Set screw
21 .....	STA5624 .....	Countersunk head screw
23 .....	AR81-270 .....	Cover plate, upper
24 .....	AR81-271 .....	Cover plate, lower
25 .....	STA5897 .....	Hex flange nut
26 .....	STA5322 .....	Hex cap screw
27 .....	STA6056 .....	Lock washer
28 .....	STA5815 .....	Hex nut
29 .....	R20-148 .....	Threaded bushing
30 .....	56AE140-25 .....	Shaft for Safety guard
31 .....	56AR101P-25.1 .....	Bracket for Safety guard
32 .....	STA6165 .....	Washer
33 .....	STA6020 .....	Washer
34 .....	AR81-71 .....	Guide plate for bowl arms

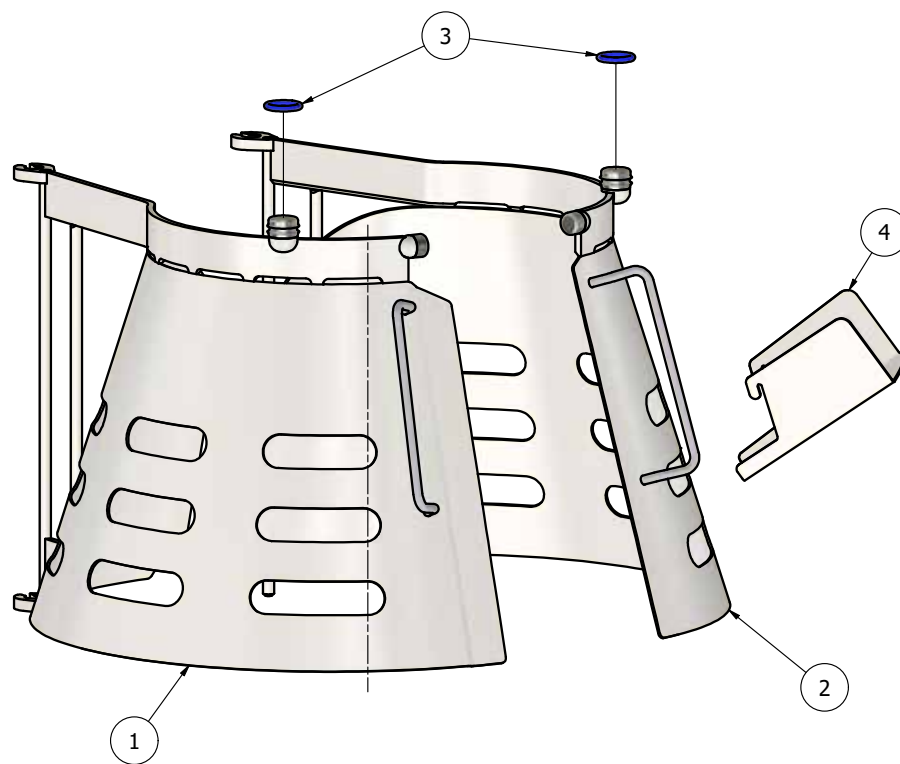




**SAFETY GUARD**

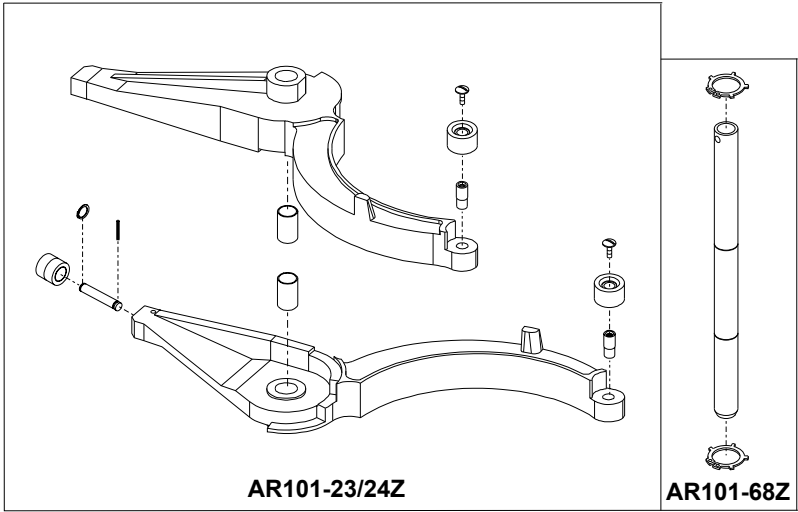
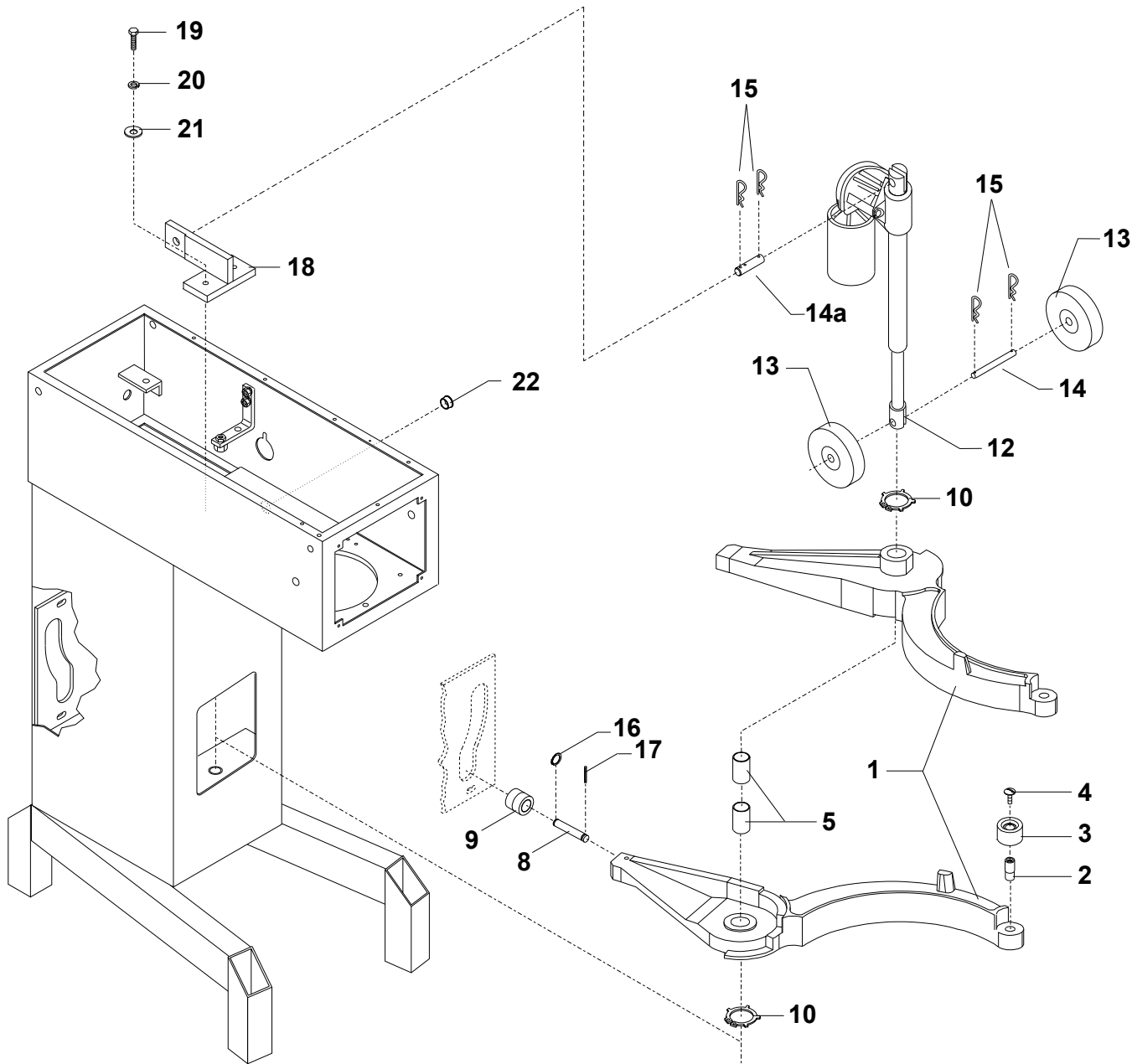
---

<b>FIG NO.</b>	<b>ORDER NO.</b>	<b>DESCRIPTION</b>
1 .....	35AR101-21.3M...	Safety guard left
2 .....	35AR101-22.3M...	Safety guard right
3 .....	STA3149 .....	O-ring
4 .....	56CE101-280.....	Filling tray



**LIFTING SYSTEM**

<b>FIG NO.</b>	<b>ORDER NO.</b>	<b>DESCRIPTION</b>
1 .....	AR101-23/24Z.....	Bowl arm set, colour black
2 .....	AR31-127 .....	Roller shaft
3 .....	AR31-128.....	roll for bowl clamping
4 .....	STA5088 .....	Screw
5 .....	STA2526 .....	Bearing bushing
8 .....	AR81-71.10.....	Shaft for bowl arm guide
9 .....	AR81-71.5M.....	Bush for bowl arm guide, mount
10 .....	STA3462 .....	Circlip
11.....	AR101-68Z.....	Bowl arm, guide rod
12 .....	AR30-86.2B .....	Lifting motor
13 .....	RN100-66.....	Guide for lifting motor
14 .....	RN100-67.....	shaft
14a .....	AR80-86.41 .....	Shaft
15 .....	STA6005 .....	Distance bushing
16 .....	STA3408 .....	Circlip
17 .....	STA6381 .....	Pin
18 .....	AR101-86.40.....	Fitting for lifting motor
19 .....	STA5322 .....	Screw
20 .....	STA6020 .....	Washer
21 .....	STA6056 .....	Spring lock washer
22 .....	STA6517 .....	Blanking plug



.....Identification of motor, see page 18.

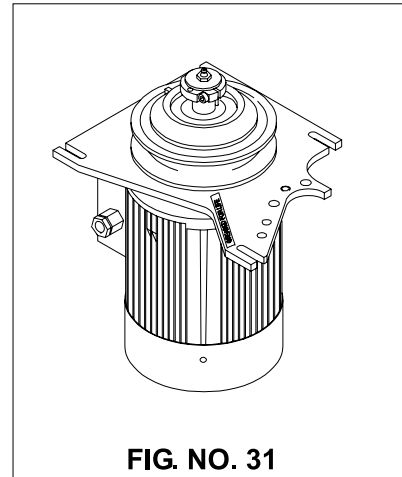
**31 ..Drive unit, cable included**

.....**Motor R100-85.1, 2,9 kW, 3x400V50Hz / 3x480V/60Hz**

.....07080-2930

.....**Motor R100-85.52, 3 kW, 3x200V/50Hz / 3x208V/60Hz**

.....07080-3030



**FIG. NO. 31**

This page intentionally left blank

## MICROSWITCHES

FIG NO.	ORDER NO.	DESCRIPTION
1 .....	56CR10-111M .....	Safety Switch
2 .....	STA5320 .....	Hex cap screw
3 .....	STA5837 .....	Lock Nut
4 .....	STA5721 .....	Hex cap screw
5 .....	AR31-53 .....	Bracket for switch
6 .....	STA5253 .....	Screw
7 .....	AR61-522 .....	Microswitch
8 .....	STA5045 .....	Hex Cap screw
9 .....	AR81-53.01 .....	Angle fitting
10 .....	STA6008 .....	Washer
11 .....	STA5435 .....	Hex cap screw
12 .....	AR30-194.41M .....	Lifting signal cable
	AR61-53.61M .....	Lifting contacts assembly

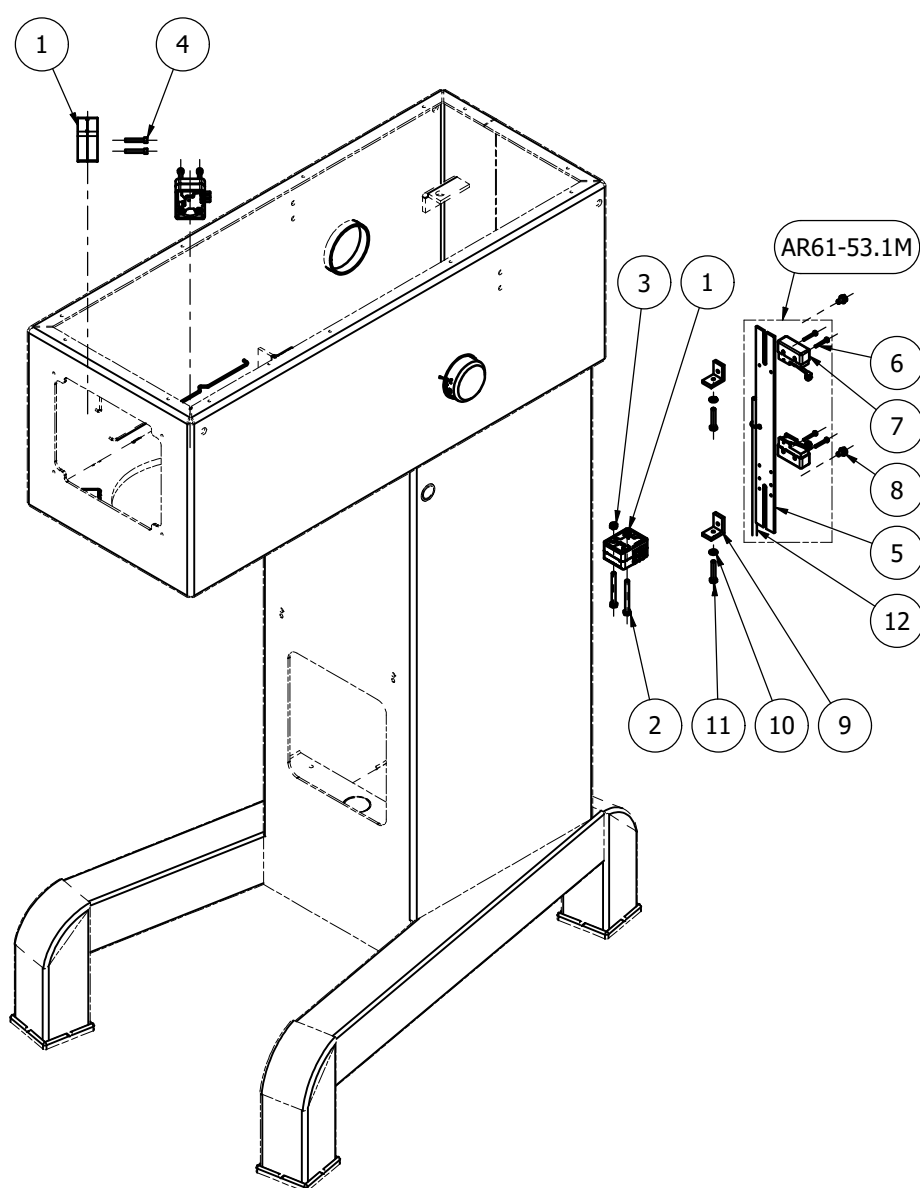
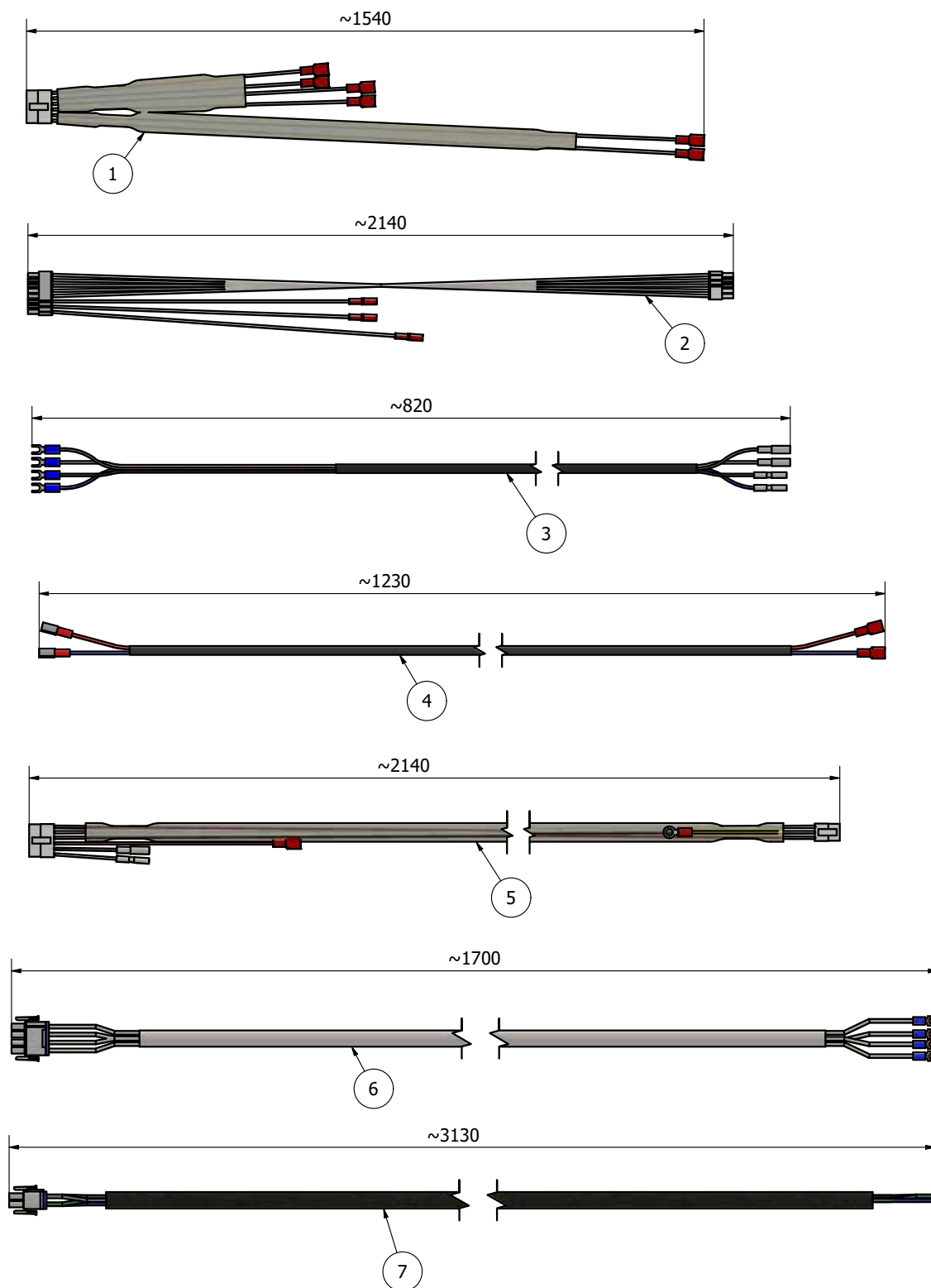




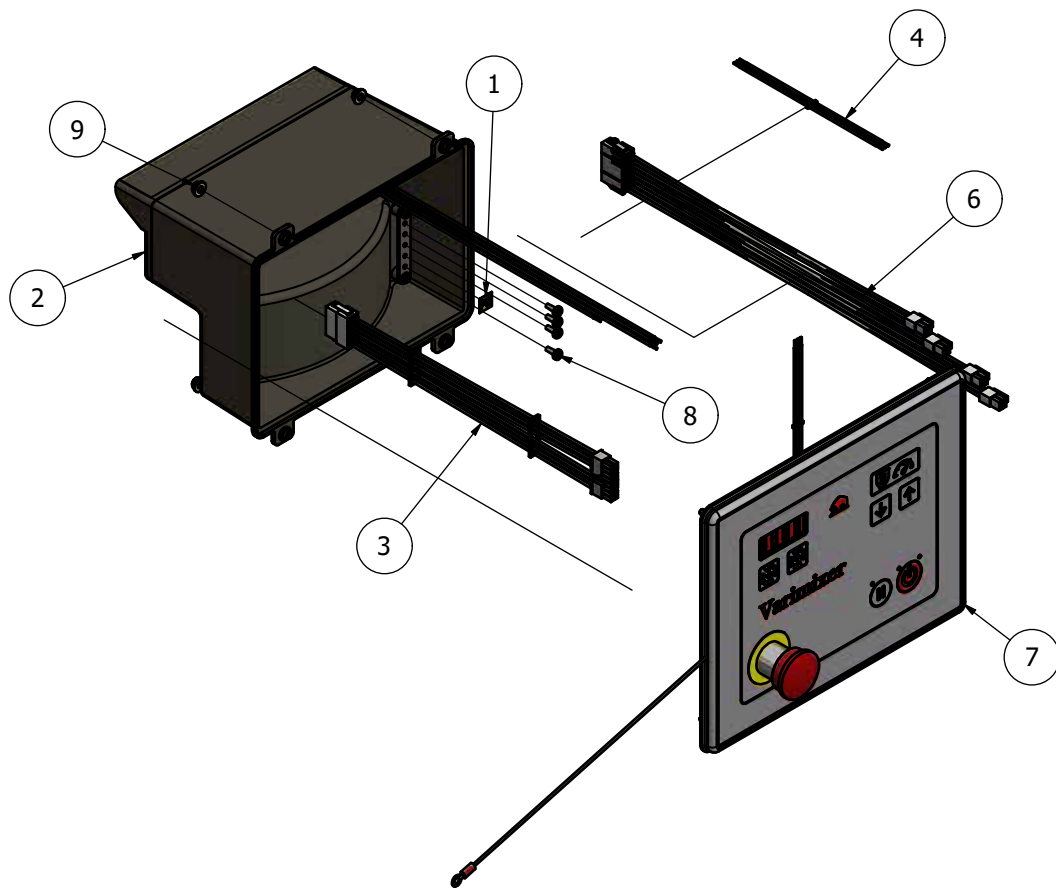
FIG NO.	ORDER NO.	DESCRIPTION
1 .....	AR31-194.19M .....	Cable, safety switches
2 .....	AR31-194.90M .....	Signal cable
3 .....	AR30-194.41M .....	Lifting signal cable
4 .....	AR31-194.23M .....	Actuator cable
5 .....	AR31-194.87M .....	Supply cable
6 .....	AR31-194.62M .....	Motor supply cable
7 .....	AR31-194.59M .....	Power supply cable, with neutral
.....	AR31-194.65M .....	Power supply cable, without neutral



## ELECTRIC COMPONENTS

FIG NO.	ORDER NO.	DESCRIPTION
1 .....	AR30-453.1.....	Physical earth label
2 .....	AR31-152.2M.....	Enclosure assembly
3 .....	AR31-194.18M.....	Safety cable
4 .....	AR31-194.82M.....	Supply cable
5 .....	AR31-194.88M.....	Supply cable
6 .....	AR31-194.91M.....	Signal cable
7 .....	AR31-530.16M.....	Front panel assembly
8 .....	STA5232 .....	Self tapping Screw
9 .....	STA5897 .....	Hex flange nut

Frequency	Voltage	Motor	Power	Current	Connection	Contactor,	Thermal Overload Relay	Overload relay
[Hz]	[V]	[Item no.]	[kW]	[A]		[fig.22]	[fig.23]	setting [fig.23a] [A]
50	3x230	R100-85.1	2,9	13	Δ	AR31-88.104 +AR31-88.146	AR31-88.206	16
	3x380-415			7,5	Y		AR31-88.204	9
60	3x480			R100-85.52		3		6,5
	3x208	13	Δ		16			



**FRONT PANEL ASSEMBLY**

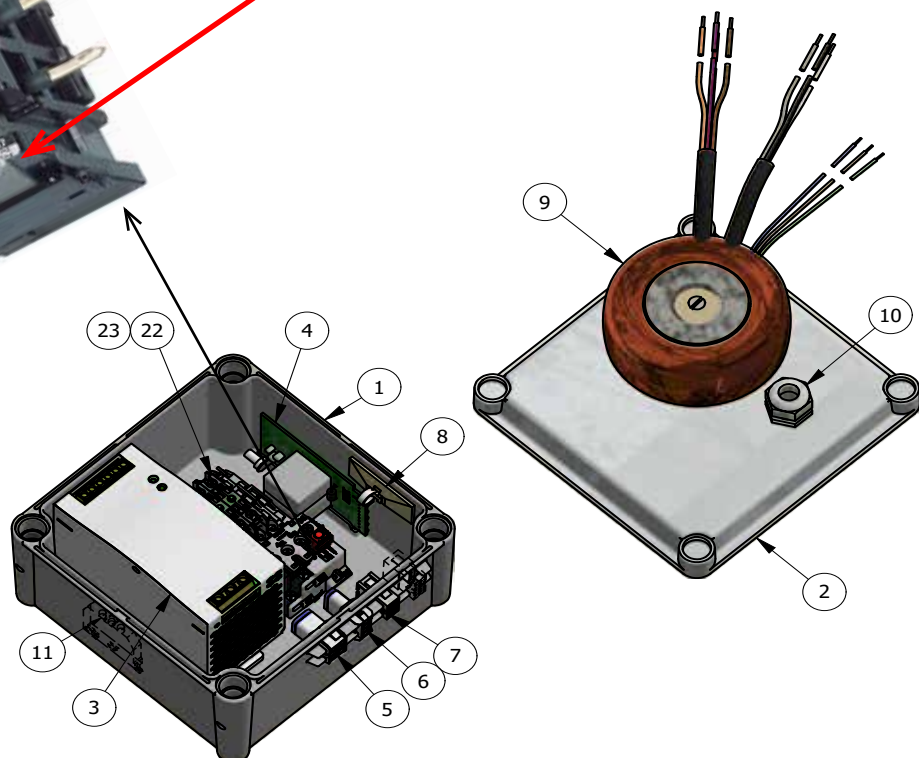
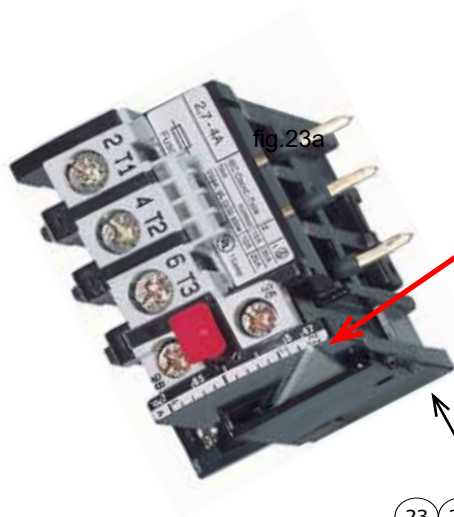
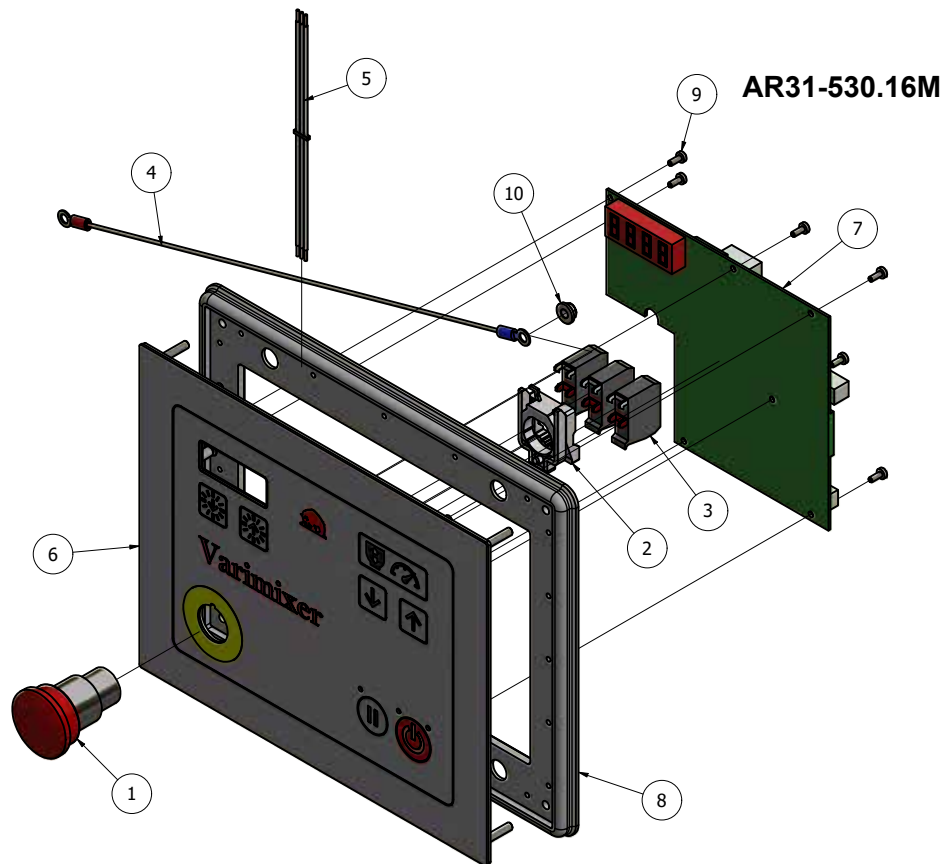
<b>FIG NO.</b>	<b>ORDER NO.</b>	<b>DESCRIPTION</b>
1 .....	AR31-174.35.....	Switch emergency stop
2 .....	AR31-174.36.....	Switch mounting Collar
3 .....	AR31-174.37.....	Switch contact block
4 .....	AR31-194.41M.....	Grounding cable
5 .....	AR31-194.82M.....	Supply cable
6 .....	AR31-530.6.....	Front Panel
7 .....	AR31-532.11 .....	Control board
8 .....	AR31-562.....	Gasket
9 .....	STA5762 .....	Screw
10 .....	STA5897 .....	Hex flange nut

**ENCLOSURE BOX ASSEMBLY**

<b>FIG NO.</b>	<b>ORDER NO.</b>	<b>DESCRIPTION</b>
1 .....	AR31-418.9M.....	Enclosure
2 .....	AR31-418.6.....	Enclosure cover
3 .....	AR31-414.1.....	Power Supply
4 .....	AR30-425.1.....	Electronic limit switch
5 .....	AR31-194.58M.....	Wire harness
6 .....	AR31-194.64M.....	Wire harness
7 .....	AR31-194.86M.....	Wire harness
8 .....	STA6161 .....	Cable tie mount
9 .....	*1) .. AR30E-430 .....	Isolating transformer
10 .....	STA3002 .....	Cable gland
11 .....	AR30-457 .....	Screw terminal
22 .....	*2) .....	Contactor
23 .....	*2) .....	Thermal Overload Relay

..... \*1) .. With isolating transformer, >380V without neutral

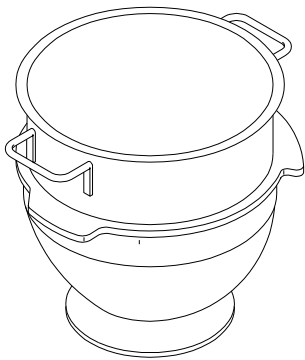
..... \*2) .. See page 18



**BOWLS AND MIXING TOOLS**

<b>FIG NO.</b>	<b>ORDER NO.</b>	<b>DESCRIPTION</b>	
1 .....	RN100-75M	A	100 Bowl
1 .....	RN100-75BM	B	100/40 Bowl
1 .....	RN100-75AM	C	100/60 Bowl
2 .....	RN100-78M	A	100 Hook
2 .....	RN100-78.5M	A	100 Hook, standard, double pin
2 .....	RN100-78BM	B	100/40 Hook
2 .....	RN100-78AM	C	100/60 Hook
3 .....	RN100-27M	A	100 Beater, aluminium
3 .....	RN100-27.5M	A	100 Beater, standard, aluminium, double pin
3 .....	RN100-27.2M	A	100 Beater, stainless steel
3 .....	RN100-27.6M	A	100 Beater, stainless steel, double pin
3 .....	RN100-27BM	B	100/40 Beater, standard, aluminium
3 .....	RN100-27B2M	B	100/40 Beater, stainless steel
3 .....	RN100-27AM	C	100/60 Beater, standard, aluminium
3 .....	RN100-27A2M	C	100/60 Beater, stainless steel
4 .....	RN100-28M	A	100 Whip, standard
4 .....	RN100-28.5M	A	100 Whip, standard, double pin
4 .....	RN100-28MS	A	100 Whip, thicker wires
4 .....	RN100-28.5MS	A	100 Whip, thicker wires , double pin
4 .....	RN100-28MT	A	100 Whip, thinner wires wires
4 .....	RN100-28.5MT	A	100 Whip, thinner wires wires, double pin
4 .....	RN100-28BM	B	100/40 Whip, standard
4 .....	RN100-28BMS	B	100/40 Whip, thicker wires
4 .....	RN100-28AM	C	100/60 Whip, standard
4 .....	RN100-28AMS	C	100/60 Whip, thicker wires
5 .....	44RN100	A	100 Whip with reinforcement No. 44b
6 .....	14RN100	A	100 Wing whip No. 14
6 .....	14RN100B	B	100/40 Wing whip No. 14
6 .....	14RN100A	C	100/60 Wing whip No. 14
7 .....	39RN100	A	100 Powder mixer
8 .....	** 42RN100P	A	100 Scraper with Blade (PA) and holder
8 .....	** 42RN100PT	A	100 Scraper with Blade (PTFE) and holder
8 .....	** 42RN100BP	B	100/40 Scraper with Blade (PA) and holder
8 .....	** 42RN100BPT	B	100/40 Scraper with Blade (PTFE) and holder
8 .....	** 42RN100AP	C	100/60 Scraper with Blade (PA) and holder
8 .....	** 42RN100APT	C	100/60 Scraper with Blade (PTFE) and holder
9 .....	42RN100-202	A	100 Scraper with Blade (PA)
9 .....	42RN100-202T	A	100 Scraper with Blade (PTFE)
9 .....	42RN100B-202	B	100/40 Scraper with Blade (PA)
9 .....	42RN100B-202T	B	100/40 Scraper with Blade (PTFE)
9 .....	42RN100A-202	C	100/60 Scraper with Blade (PA)
9 .....	42RN100A-202T	C	100/60 Scraper with Blade (PTFE)
10 .....	42R100-105		Scraper holder
11 .....	42RN100-204	A	100 Blade (PA) for scraper
11 .....	42RN100-204T	A	100 Blade (PTFE) for scraper
11 .....	42RN100B-204	B	100/40 Blade (PA) for scraper
11 .....	42RN100B-204T	B	100/40 Blade (PTFE) for scraper
11 .....	42R60-204	C	100/60 Blade (PA) for scraper
11 .....	42R60-204T	C	100/60 Blade (PTFE) for scraper
12 .....	STA5652		Screw
13 .....	STA6029		Washer
14 .....	48R60Z		Rack for mixing tools
15 .....	22RN100	A	100 Bowl truck
15a .....	22RN100B	B	100/40 Bowl truck
15a .....	22RN100A	C	100/60 Bowl truck
16 .....	22R276	A	Bowl truck Handle
16a .....	22R277	B/C	Bowl Truck Handle (Downsize Bowl)
17 .....	22R100-40	A	Bowl truck frame
17a .....	22R30-41	B/C	Bowl Truck Frame (Downsize Bowl)
18 .....	22R140.5	A	Spacer
18 .....	22R140.1-4W	B	Spacer
18 .....	22R140.1	C	Spacer
19 .....	STA5608		Hex socket set screw
20 .....	22R30-520		Castor wheel
21 .....	STA5642		Socket head screw
22 .....	STA5676	A	Slotted set screw
22a .....	STA5675	B/C	Slotted set screw

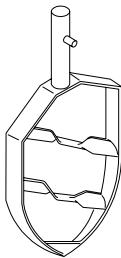
..... All materials Stainless steel,  
 ..... unless otherwise specified  
 ..... \*\* ..... Adapted by mounting  
 ..... A..... Full size bowl  
 ..... B..... Size 100/40 bowl  
 ..... C..... Size 100/60 bowl



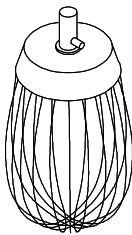
1



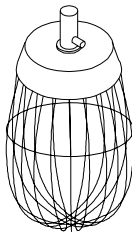
2



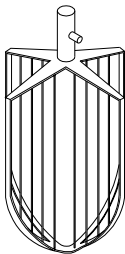
3



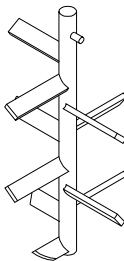
4



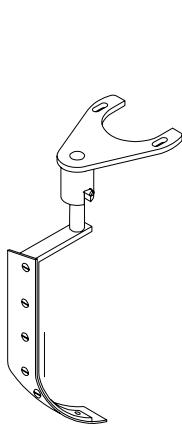
5



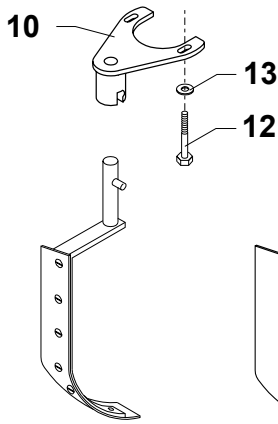
6



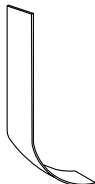
7



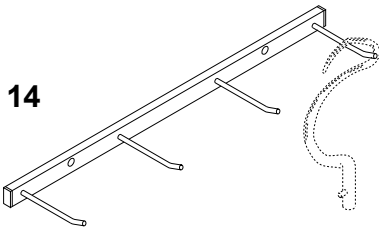
8



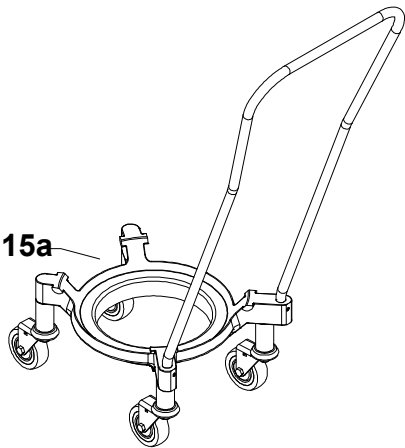
9



11

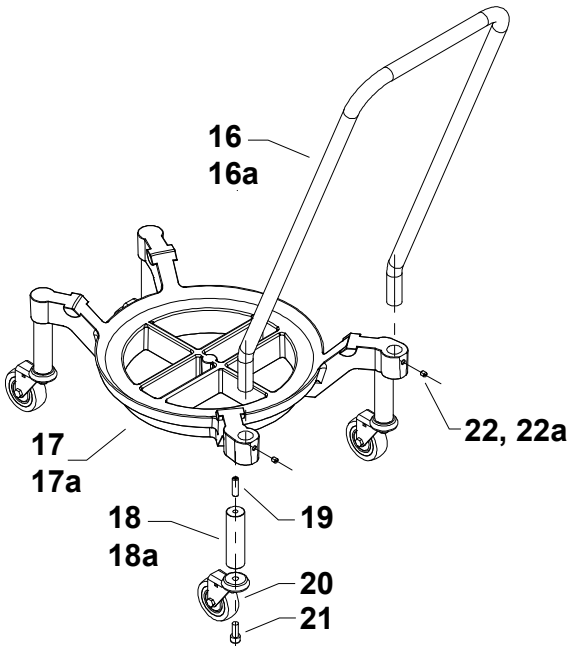
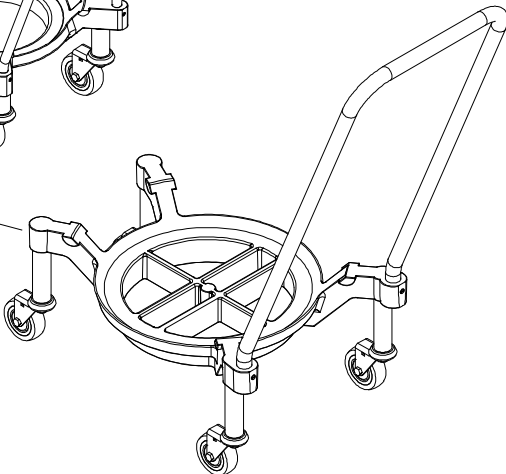


14



15a

15



16  
16a

17  
17a

18  
18a

19

20  
21

22, 22a



# Varimixer

---

Varimixer A/S  
Elementfabrikken 9  
DK-2605 Brøndby  
P: +45 4344 2288  
E: [info@varimixer.com](mailto:info@varimixer.com)  
[www.varimixer.com](http://www.varimixer.com)

