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Appendix

Exploded view drawing and part list

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EC Declaration of Conformity

Manufacturer: Rojo Machines Finland
Hovinsaari, Sahankatu 22
FI-48200 KOTKA
Finland

Representative:

Machine description: ROJO 50TM, serial No:

Harmonization standard:

EN 292 - 1, -2; EN ISO 12100

The machinery stated above is herewith declared to be in conformity with the essential requirements in the Machinery Directive 2006/42/EC with amendments.

Kotka 12/3/2025

ROJO MACHINES FINLAND

A handwritten signature in blue ink, appearing to read 'Aleksi Nieminen'.

Aleksi Nieminen



Electricity Measuring Protocol

Manufacturer

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Mixer model: 50TM
Manufacturing year:

Serial No:
x

1) Motor specifications

Serial number:

2) Measuring results

50 Hz, 400 V

Phase:	L1	L2	L3
Amp:			

3) Mixer checklist after assembly.

- Electrical connections checked.
- Buttons and phase switch tested.
- Mixer rotation checked and calibrated.
- Paddles and arms tightened.

12/3/2025

ROJO MACHINES FINLAND

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Care and maintenance instructions

4) Drive

The mixer is equipped with a helical gear motor. Oil type, quantity and oil change interval is presented in this guide on page 11.

The motor is equipped with a power switch, start / stop button, an emergency stop switch and a connector with phase inverter. Power supply: 400 V, 3P + N + E, 50 Hz

5) Spare parts

Rojo Machines Finland and our representatives sell spare parts for Rojo mixers. The manufacturer is not liable for any damage and breakdowns caused by using other than manufacturer's own machinery parts and spare parts.

6) Mixer Drum

Clean the mixer daily. A clean mixer will give the best mixing result and a longer working life.

- **Don't charge the mixer with bigger batches for what the mixer is designed for.**





7) Cleaning

It is important to clean the mixing drum, paddle arms and paddles daily. This prevents old hardened concrete from contaminating the freshly mixed batch. A clean mixer also improves safe operation of the mixer.



8) Lid

To maximize personal safety, the lid is equipped with a limit switch that will trip the power supply if the lid is not fully closed. Always keep the lid closed when the mixer is in operation. Do not remove the lid until the mixer is switched off and isolated.

9) Noise level

Level of sound at 1 m distance from the mixer is 85 dB (A). **Use ear protection.**

10) Handling

- Never lift the mixer when the drum is full of concrete
- After the mixer is stopped do not restart the mixer when the drum is full of mixed heavy material. For example in case of a power failure the mixer must be emptied manually.
- It is important to clean the mixer to ensure that old material from the previous charge will not impair the quality of the material being mixed and to avoid breakdowns of planetary gear motor for example.
- The mixer must not mix masses that are larger than its capacity.
- Before service and maintenance work, always make certain that the mixer is switched off and disconnected.



- Hand, tools or anything else is absolutely forbidden to insert into the drum while the mixer is running
- Only personnel who are well acquainted with the handling and the use of the mixer may use it.
- When the motor is switched on, it is very important that the phase sequence is correct. The connector of the starter is equipped with a phase inverter that is used for reversing the direction of rotation. The direction of rotation should be anti-clockwise. Serious damage may occur if the mixer rotates in the wrong direction.
- **Use the on/off buttons on the starter to operate the mixer. Use the emergency stop button only at an emergency!**



General safety information

When the mixer is in operation, some of its parts moves and rotates.

As a result, improper use, removal of protective devices, disconnecting of safety devices, inadequate inspection and maintenance **MAY LEAD TO SERIOUS INJURY ON PERSON OR EQUIPMENT.**

Those who are responsible for safety must therefore ensure that:

The mixer is transported, installed, operated, inspected, maintained and repaired only by personnel:

- With adequate training and experience
- Knowledge of general safety regulations, national and local laws and other requirements
- With ability to recognize and avoid operations that may be dangerous

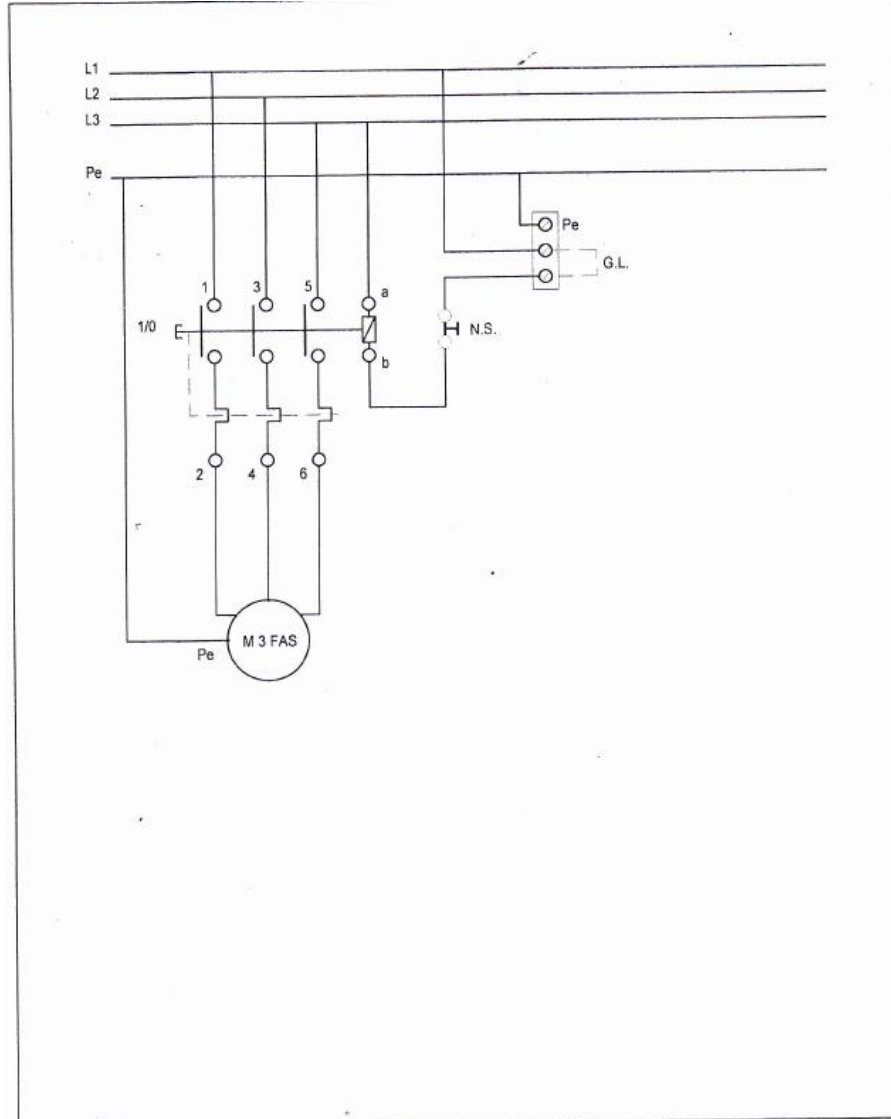
All maintenance and inspection work have to be carried out with the permission of the person responsible for safety. During previously mentioned work, mixer has to be stationary and disconnected, with the power supply isolated.

- **To avoid severe injury never put your hand in the drum.**
- **Always clean the drum from the top side. Switch off and disconnect the power supply before cleaning or maintenance.**





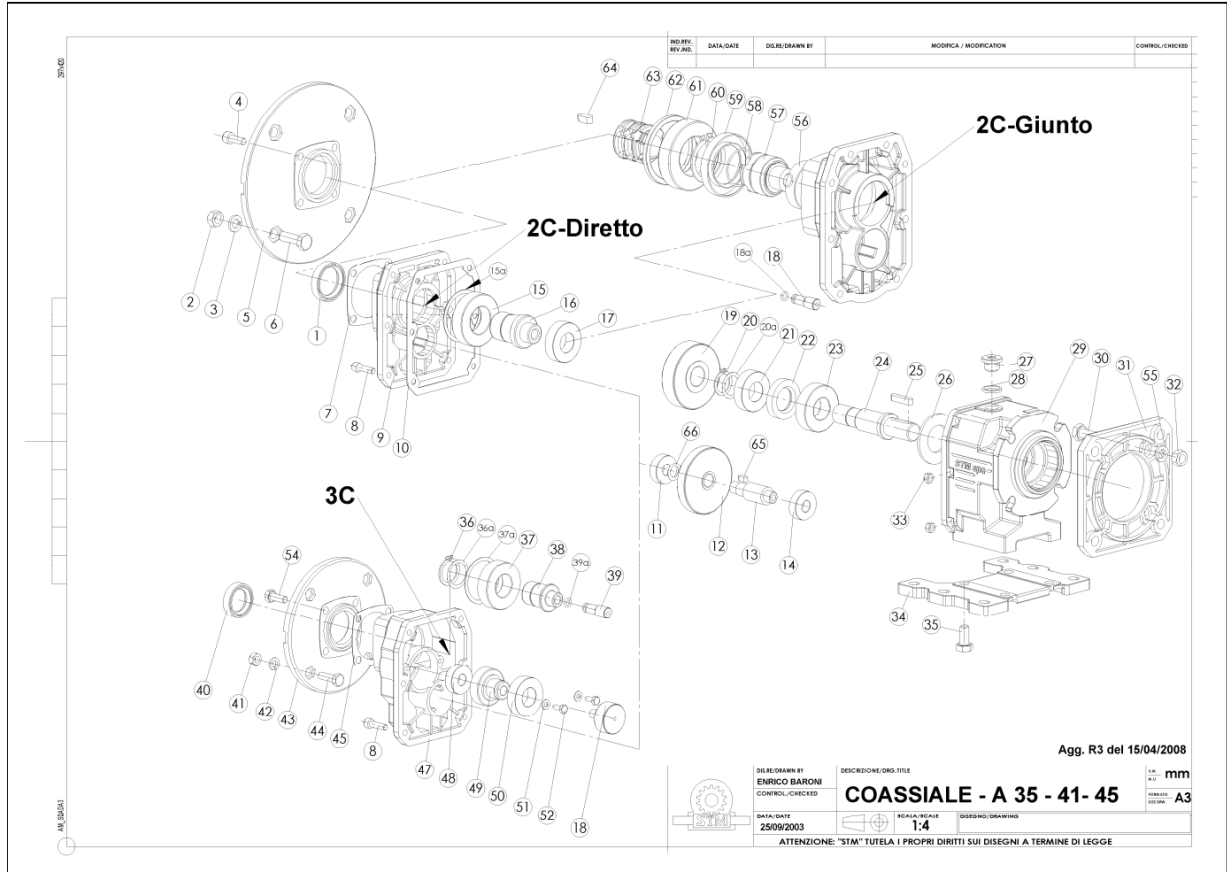
Wiring scheme



1 st Kapsling Tripus 204p76800	121129	TRIPUS EL-MEK AB	
1 st Motorskydd Tripus MS 6,3 4.0-6,3 A			
1 st Tripus Spole Uc 400 V Ms		CEMENTBLANDARE 50 TM	
1st Nödstopps zb5 as 54 + 1 st block zb5 az 102 telemek.		1.5 KW 400 VOLT Uc400 v	
1 m Kabel Rev 4 x 1,5 Aton 553881 1 st förskruvning m20		rit.nr. 121129-01	50 TM
1 st Kopplingslist med hållare 3 pol.	sb	ROJO	



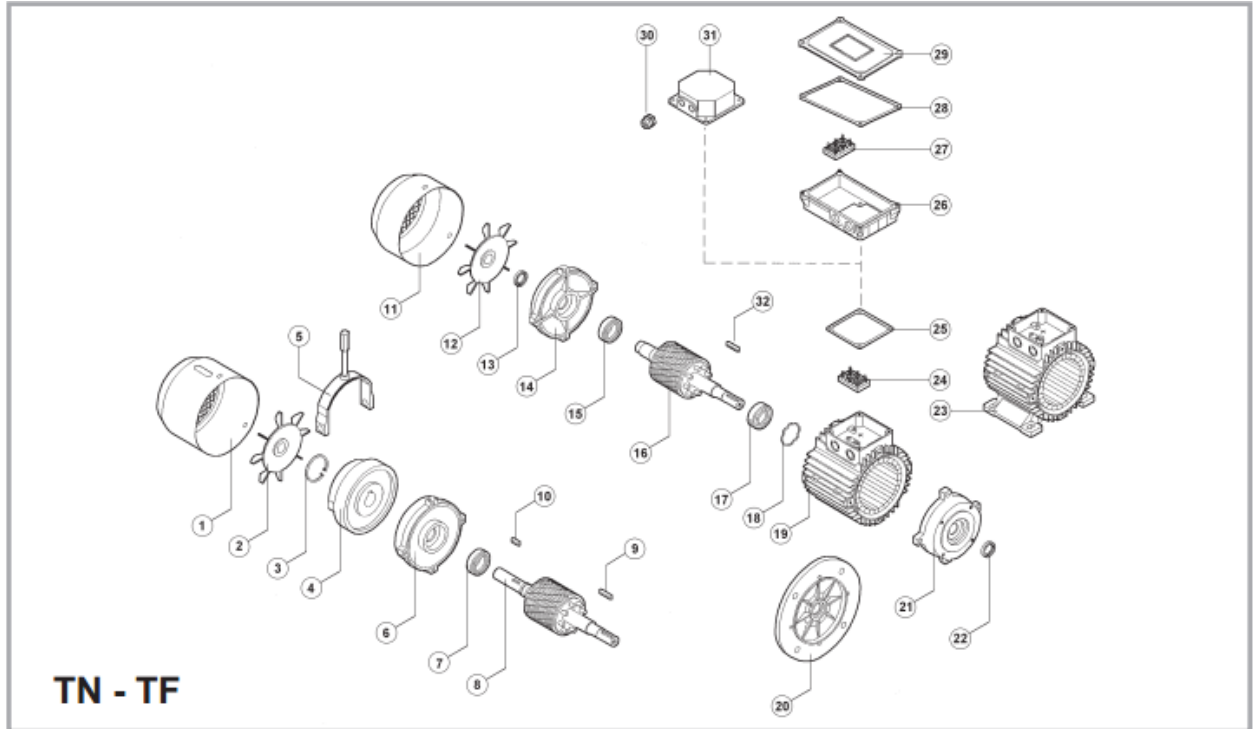
Planetary gear and part list



ITEM	DESCRIZIONE (I)	DESCRIPTION (GB)	DESIGNATION (F)	BEZEICHNUNG (D)	DENOMINACION (E)
1	ANELLO DI TENUTA	OILSEAL	JOINT D'ETANCHEITE	ÖLDICHTRING	ANILLO DE RETEN
2	DADO	NUT	ECROU	MUTTER	TUERCA
3	GROWER	SPRING WASHER	RONDELLE FREIN	FEDERRING	GROWER
4	VITE DI FISSAGGIO	SCREW	VIS	BEFESTIGUNGSSCHRAUBE	TORNILLO DE SUJECION
5	FLANGIA PAM	MOTORFLANGE	BRIDE MOTEUR	MOTOR FLANSCH	BRIDA PAM
6	VITE DI FISSAGGIO	SCREW	VIS	BEFESTIGUNGSSCHRAUBE	TORNILLO DE SUJECION
7	GUARNIZIONE	GASKET	JOINT PAPIER	DICHTUNG	JUNTA
8	VITE DI FISSAGGIO	SCREW	VIS	BEFESTIGUNGSSCHRAUBE	TORNILLO DE SUJECION
9	SUPPORTO FLAM	ICE FLANGE INPUT SUPPORT	SUPPORT BRIDE MOTEUR	AUFNAHME ANTRIEB IEC FLANSCH	SOPORTE FLAM
10	GUARNIZIONE	GASKET	JOINT PAPIER	DICHTUNG	JUNTA
11	CUSCINETTO	BEARING	ROULEMENT	WÄZLAGER	RODAMIENTO
12	INGRANAGGIO CILINDRICO	CYLINDRICAL GEAR	INGRANAGE CYLINDRIQUE	STIRNRAD-ZAHNRÄDER	ENGRANAJE CILINDRICO
13	ALBERO PIGNONE	PIGNION SHAFT	ARBRE PIGNON	RITZELWELLE	EJE PIÑON
14	CUSCINETTO	BEARING	ROULEMENT	WÄZLAGER	RODAMIENTO
15	CUSCINETTO	BEARING	ROULEMENT	WÄZLAGER	RODAMIENTO
15a	RASAMENTO	SHIM	CALE	EINSTELLSCHEIBE	ESPESOR
16	MANICOTTO	INPUT SHAFT IEC	MANCHON	ANTRIEBSWELLE IEC	MANGUITO
17	CUSCINETTO	BEARING	ROULEMENT	WÄZLAGER	RODAMIENTO
18	PIGNONE CILINDRICO ELIC.	HELICAL PIGNION	PIGNON CYL. HELYCOIDAL	RITZEL (STIRNRAD)	PIÑON CILINDRICO HELIC.
18a	OR	O - RING	O - RING	O - RING	O - RING
19	INGRANAGGIO CILINDRICO	CYLINDRICAL GEAR	INGRANAGE CYLINDRIQUE	STIRNRAD-ZAHNRÄDER	ENGRANAJE CILINDRICO
20	SEEGER	CIRCLIP	CIRCLIP	SICHERUNGSRING	SEEGER
20a	RASAMENTO	SHIM	CALE	EINSTELLSCHEIBE	ESPESOR



Motor and part list



TN - TF

1	Copriventola	Fan cover	Lüfterhaube
2	Ventola	Fan	Lüfter
3	Seeger	Circlip	Seeger
4	Freno	Brake	Bremse
5	Leva di sblocco	Hand release	Handlüftung
6	Scudo posteriore	Non drive end shield	Hinteres Lagerschild
7	Cuscinetto	Bearing	Lager
8	Rotore	Rotor	Rotor
9	Linguetta	Key	Keil
10	Linguetta	Key	Keil
11	Copriventola	Fan cover	Lüfterhaube
12	Ventola	Fan	Lüfter
13	Anello di tenuta	Oilseal	Dichtring
14	Scudo posteriore	Non drive end shield	Hinteres Lagerschild
15	Cuscinetto	Bearing	Lager
16	Rotore	Rotor	Rotor
17	Cuscinetto	Bearing	Lager
18	Molla di precarico	Pre load spring	Vorspannfedern
19	Cassa B5-B14	B5/B14 housing	Gehäuse B5-B14
20	Flangia B5	B5 Flange	Flansch B5
21	Scudo anteriore (B14)	Drive end shield (B14)	Vorderes Lagerschild (B14)
22	Anello di tenuta	Oilseal	Dichtring
23	Cassa con piedi	Foot casing	Gehäuse mit Fuß
24	Morsettiera	Terminal board	Klemmbrett
25	Guarnizione	Gasket	Dichtung
26	Scatola morsettiera	Terminal box	Klemmenkasten
27	Morsettiera	Terminal board	Klemmbrett
28	Guarnizione	Gasket	Dichtung
29	Coperchio morsettiera	Terminal box cover	Klemmenkastendeckel
30	Pressacavo	Cable gland	Kabelverschraubung
31	Scatola morsettiera	Terminal box	Klemmenkasten
32	Linguetta	Key	Keil

	Cuscinetti Bearings Kugellager 15 — 17	Cuscinetti Bearings Kugellager 7
55	6201-2Z	—
56	6201-2Z	6201-2RS
63	6202-2Z	6202-2RS
71	6203-2Z	6003-2RS
80	6204-2Z	6204-2RS
90	6205-2Z	6205-2RS
100	6206-2Z	6206-2RS
112	6306-2Z	6306-2RS
132	6308-2Z	6308-2RS
160	6309-2Z	6309-2RS
180	6310-2Z	—
200	6312-2Z	—



Oil type, quality and oil change interval

The worm gear is delivered with a synthetic Shell Tivela Sc320 gear oil. Quantity of the gear oil is 0,35 litres. Oil change interval is determined by operating conditions:

Frequenza cambi olio [h]
Oil change intervals [h]
Frequenz - Ölwechsel [h]

Tipo olio <i>Oil type</i> Öltyp	Temperatura olio <i>Oil temperature</i> Öltemperatur		
	65°C	80°C	90°C
Minerale <i>Mineral</i> Mineralöl	8000	3000	1000
Sintetico <i>Synthetic</i> Synthetiköl	20000	15000	9000