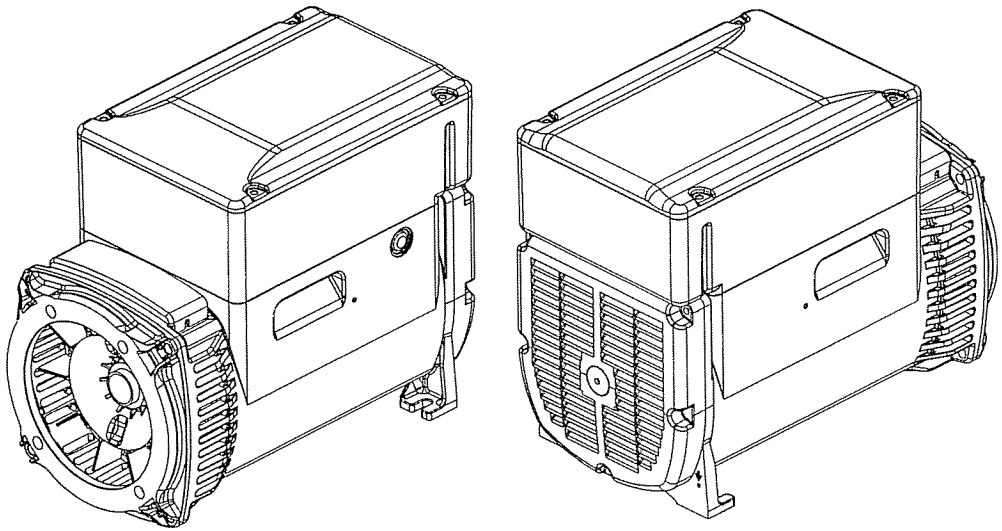
LINZ ELECTRIC



E1S10M
E1S10L
E1S11M
E1S13S/2
E1S13S/4
E1S13M/2
E1S13M/4

E1S

CE

Istruzioni per l'uso e la manutenzione
Alternatori serie **E1S**

Installation, operation and maintenance manual
alternators series **E1S**

Instrucciones para el uso y mantenimiento
alternadores serie **E1S**

Mode d'emploi et d'entretien
alternateurs série **E1S**

Gebrauchs und wartungsanleitung
generatoren serie **E1S**

E1S Three-phase synchronous alternators with brushes 2/4 poles

INDEX

1. SAFETY INSTRUCTIONS:

Before using the generating set it is necessary to read the «Use and Maintenance Manual» for the generating set and the alternator, and to follow the recommendations below:

⇒ **Safe and efficient functioning can be achieved only if the machines are used correctly, according to the instructions provided by the relevant use and maintenance manuals, and safety recommendations.**

⇒ **An electric shock can cause serious personal injuries and even death.**

⇒ **Do not remove the terminal board cover and the alternator's protection grid before the alternator has come to a complete stop, and before deactivating the starting system of the generating set.**

⇒ **The generating set maintenance must be carried out exclusively by competent and qualified personnel.**

⇒ **Do not wear loose garments when working near the generating set.**

People in charge of operating the set must always wear protective gloves and safety shoes.
In the event that the generator, or the whole generating set need to be lifted from the floor, the operators must wear a safety helmet as well.

Safety notices used in this manual have the following meaning:

Important!: it refers to dangerous or risky operations that may damage the equipment;

Caution!: it refers to dangerous or risky operations that may damage the product or cause personal injuries;

Warning!: it refers to dangerous or risky operations that may cause serious personal injuries or even death;

Danger!: it refers to an immediate risk that may cause serious personal injuries or death.

The final installer of the generating set must make sure that all the necessary safety arrangements are in place in order to make the whole plant compliant with current local safety regulations (earthing, contact protection, explosion and fire safety measures, emergency stop, etc....)

2. ALTERNATOR DESCRIPTION:

The E1S series includes three-phase 2/4 poles alternators with brushes and equipped with an auxiliary winding (loaded on a compound)which ensures voltage regulation. They are manufactured in compliance with EN60034-1, EN50081-1, EN50082-1 specifications, as well as with the directives no.73/23 CEE, EMC 89/336 CEE and 98/037 CEE.

Ventilation: Axial with air inlet on the non-drive end side .

Protection: Standard IP 21. IP 23 on request.

Direction of rotation: Both directions are allowed.

Electrical features: Insulation components are made with class H material, for both stator and rotor. Windings are tropicalized.

Power values: They refer to the following conditions: room temperature up to 40°C, altitude up to 1000 m. above sea-level, continuous duty at Cosφ= 0.8.

OVERLOADS: A 10% overload for one hour every six our is normally accepted.

Mechanical features: Casing and covers are made of aluminium alloy which holds out against vibrations. The shaft is made of high-tensile steel.
The rotor is particularly sturdy to hold out against the runaway speed of the drive motors.
It is equipped with a damping cage which allows satisfactory operation even with single-phase, distorted loads. Bearings have lifelong lubrication.

Operation in particular settings: If the alternator is going to be used at more than 1,000 m above sea-level, a 4% derating per each 500 m increase will need to be operated.
If room temperature exceeds 40°C a 4% derating per each 5°C increase will need to be operated.

INSTALLATION AND START UP .
The following start up and control operations should be carried out by qualified personnel only.

⇒ The alternator must be installed in a well ventilated room. Room temperature should not exceed standard recommended values.

⇒ Particular attention must be paid to ensure that air inlets and outlets are never obstructed. While installing the alternator it is important to avoid direct suction of warm air coming from the alternator's outlet and/or from the prime motor.

⇒ Before starting up the alternator it is advisable to check (visually and manually) that all terminals in every terminal board are properly clamped and that the rotation of the rotor in not blocked in any way.

⇒ If the alternator has not been used for a long time, before starting it up it is recommended to test the windings insulation resistance to earth, keeping into account that every single part has to be isolated from the others.
This particular checkup must be carried out using a "Megger" instrument at 500 V. c.c.. Normally, windings having resistance to earth ≥1 MΩ are considered sufficiently insulated.
If windings resistance is lower than 1 Ω , insulation will have to be restored by drying the winding (using, for example, an oven at 60°-80°C temperature, or by making circulate through the wiring a proper value of current obtained from an auxiliary source).
It is also necessary to verify that the alternator's metallic parts, and the mass of the entire set are connected to the earth circuit and that the latter satisfies any applicable legal requirements.

Mistakes or oversights concerning earthing may have fatal effects.

3. ASSEMBLING INSTRUCTIONS

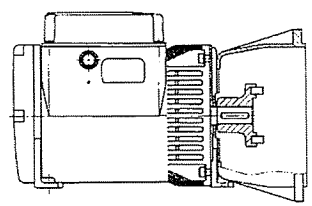
Assembling should be carried out by qualified personnel after reading the manual.

B3/B14 Construction Form

The construction form B3/B14 requires the use of a flexible coupling between the drive motor and the alternator.
The flexible coupling should not originate any axial or radial forces during operation, and will have to be mounted rigidly on the alternator shaft end. Please follow the instructions below while assembling:

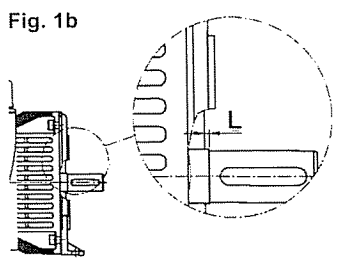
1) Apply the flexible coupling and the adaptor on the alternator as shown in Figure 1a.

Fig. 1a



When positioning the flexible coupling, remember that once coupling is over the rotor has to expand itself axially towards the coupling located on the non-driving end. To make this possible it is necessary that after assembling the shaft end is positioned according to the cover pattern, as illustrated in Figure, and related table, 1b.

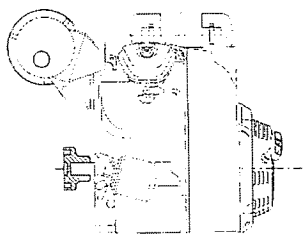
Fig. 1b



Modello	L (mm)
E1S10	2
E1S11	2
E1S13	4

2) Place the relevant flexible coupling on the revolving part of the diesel engine, as shown in Figure 1c.

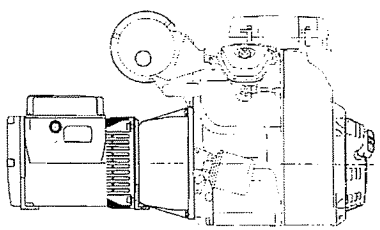
Fig. 1c



3) Mount the coupling's rubber blocks.

4) Couple the alternator to the drive motor by screwing, with suitable screws, the adaptor to the motor (see Fig. 1d).

Fig. 1d



5) Fix, using appropriate rubber anti-vibration dampers, the motor-alternator unit to the common bed-plate.
Special attention must be paid not to cause any stretching that may affect the natural alignment of the two machines.

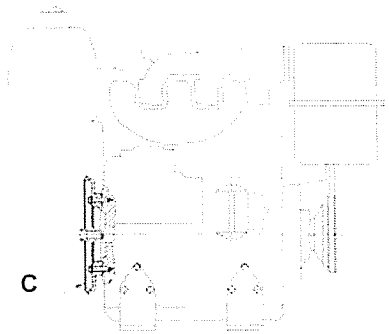
6) Make sure that the alternator's non-driving end bearing has the recommended expansion allowance (min. 2 mm.) and that it is preloaded by a preload spring.

B3/B9 Construction Form

This construction form allows direct coupling of alternator and drive motor. Please follow the instructions below when assembling:

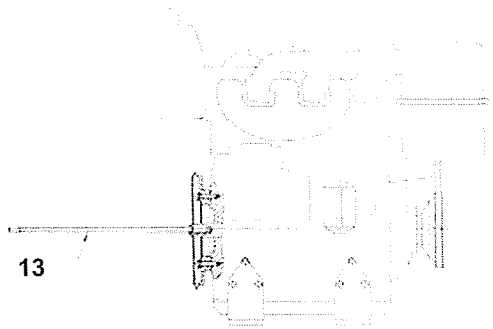
1) Clamp the "C" cover on the drive motor, as illustrated in Fig. 2a.

Fig. 2a



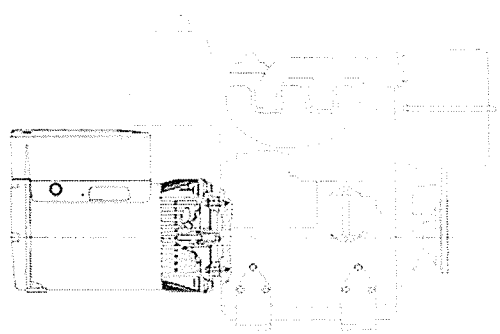
2) Apply the tie rod (13) for the axial clamping of the rotor, and screw it tight on the engine shaft end as shown in Fig. 2b.

Fig. 2b



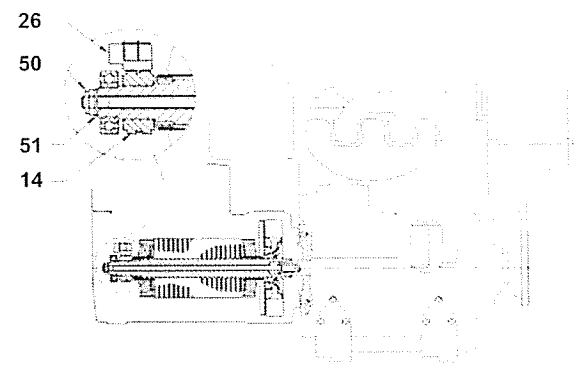
3) Secure the alternator to its cover using the 4 bolts as indicated in Fig. 2c.

Fig. 2c



4) Lock axially the rotor by placing the washer (50), and tighten the self-locking nut (51) using a torque spanner (driving torque 35 Nm for M8 tie rod and 55 Nm for M10 tie rod and 100 Nm for M14 tie rod) (Fig. 2d).

Fig. 2d

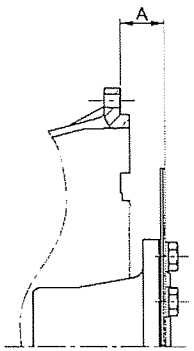


⚠ Before placing the nut make sure that the threaded part of the tie rod slides into the rotor in order to obtain a tight lock. Before assembling verify that the cone-shaped coupling housing (on both alternator and engine) are clean and in good working order.

B2 Construction Form.
This construction form too allows direct coupling of alternator and drive motor. Please follow the instructions below when assembling:

1) Check that the rotor is positioned correctly, as illustrated in Figure 3a.

Fig. 3a

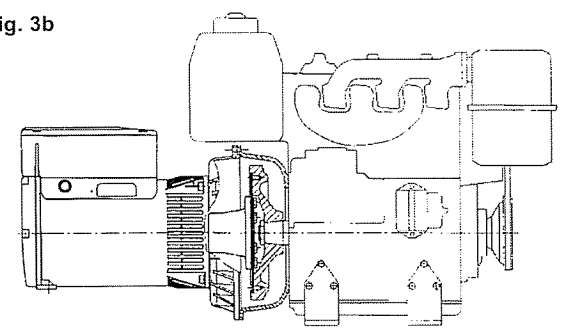


SAE	A mm
6 1/2	30.2
7 1/2	30.2
8	62
10	53.8
11 1/2	39.6
14	25.4

2) Remove rotor's locking components on the non-driving end.

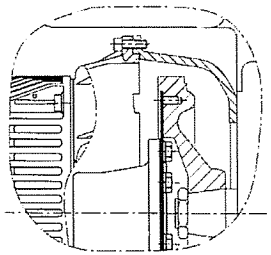
3) Place the alternator next to the drive motor, as illustrated in Figure 3b

Fig. 3b



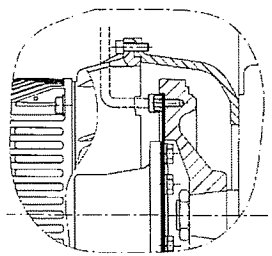
4) Centre and secure the stator to the drive motor's flange, using suitable screws, as shown in Figure 3c.

Fig. 3c



5) Centre and secure, using appropriate screws, the coupling to the drive motor's flywheel working through the air outlet, as indicated in Figure 3d.

Fig. 3d



FINAL CONTROLS
To the term of all the overwrite couplings it is necessary to control the correct axial positioning; it must be verified that:

1) Between the end of non-drive end side bearing and the surface of axial clamping exists a space of:

2 mm for the alternators with **H = E1S10**
3 mm for the alternators with **H = E1S11** ed **E1S13**

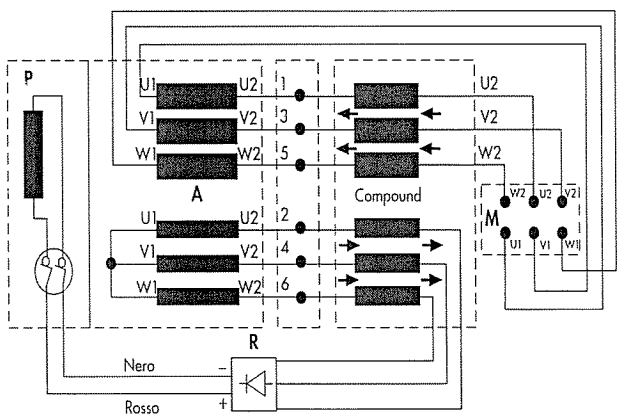
2) The brushes are centered on rings of the collector.

4. USAGE:

Power cables connections should be carried out by qualified personnel when the machine is completely still and the power cable is disconnected.

Voltage and output frequency
These alternators are designed to supply only the voltage and frequency specified in the rating plate.

5. WIRING DIAGRAMS

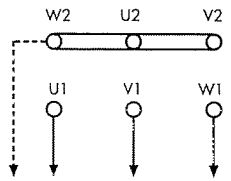


A = Avvolgimento
P = Rotore
M = Morsettiera Principale
R = Raddrizzatore

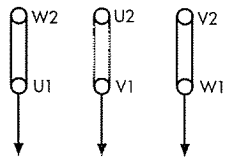
A = Winding
P = Rotor
M = Main terminal board
R = Rectifier

Connections power cables:
The E1S series alternators can work with star /neutral connection and with delta connection. The terminal board will have therefore to be connected as shown in figure 4.

Fig. 4



Star with neutral connections



Delta Connections

Type	KVA		Winding-resistance W (20°C)					Excitation of rotor			
			Alternator		auxiliary winding	compound		no load		full load	
	50 Hz	60 Hz		Rotor		primary	secondary	V_{ECC} (V)	I_{ECC} (A)	V_{ECC} (V)	I_{ECC} (A)
E1S10M/2	5.5	7	2,16	18,95	2,23	0,280	1,295	26	1,30	95	4,00
	7	8.5	1,40	21,58	1,83	0,141	1,295	29	1,30	111	4,10
E1S10L/2	9	11	1,01	21,97	1,75	0,101	1,295	28	1,20	115	4,20
E1S11M/2	10	12.5	0,87	21,19	1,60	0,075	1,190	30	1,35	114	4,30
	11.5	14	0,74	21,32	1,54	0,070	1,190	30	1,35	128	4,80
	13.5	16.5	0,49	23,86	1,47	0,043	1,190	34	1,35	133	4,45
E1S13S/2	16	20	0,54	9,79	1,30	0,052	0,648	24	2,30	96	7,85
E1S13M/2	22	27	0,36	12	1,16	0,025	0,648	24	1,90	104	6,90
	27	32	0,24	13,70	0,96	0,017	0,648	32	2,20	103	6,00
E1S13S/4	7.5	9	1,71	5,73	1,69	0,137	0,572	20	3,35	56	7,80
	9	11	1,17	6,58	1,48	0,086	0,572	22	3,20	62	7,50
	11	13.5	0,88	7,22	1,34	0,057	0,572	25	3,30	69	7,65
E1S13M/4	13	16	0,73	7,85	1,30	0,045	0,572	26	3,15	76	7,70
	16	19	0,53	9,46	1,17	0,028	0,572	33	3,30	89	7,50
	19	23	0,46	9,86	1,20	0,02	0,572	35	3,35	95	7,70

6. VOLTAGE AND OUTPUT FREQUENCY ON THE THREE PHASE ALTERNATORS

These alternators are designed to supply the voltage at:

- V 400 at 50Hz or 480 V. at 60Hz with star/neutral connection
- V 231 at 50Hz or 277 V. at 60Hz with delta connection

7. SINGLE PHASE DUTY OF THREE-PHASE ALTERNATORS

The output power in single-phase in continuous duty is approximately 65% of three-phase output power in case of line-to-line voltage and 40% in case of phase voltage (star connection).

8. VOLTAGE CALIBRATION AND REVOLVING SPEED

The calibration of voltage should be carried out by qualified personnel only because of electrocution hazard.

A checkout of the alternator's output voltage should be carried out **at the nominal revolving speed** (3000 r.p.m. for the alternators at 2 poles and 1500 r.p.m. for those at 4 poles).

The alternators are calibrated to distribute the nominal voltage.

Light deviations of the output voltage can be caused by a revolving speed which is different from the nominal one.

The output voltage changes proportionally to the revolving speed.

To correct the no-load voltage of the alternator at a specific revolving speed, it is necessary to act on the air gap of the compound transformer as under described (see figure 5).

1) Loose the tightening of two screw nuts N
2) Modify the height of air gap considering that:
   a) increasing it the voltage grows;
   b) decreasing it the voltage lows down; slight voltage variations they can be obtained with a small hammer and a screwdriver. In case the variation of demanded voltage exceeds 5% is necessary to proceed to the replacement of the insulating thickness (t) that forms the air gap.
3) Once regulation is effected, tighten the two screw nuts N.

Fig. 5

ATTENTION: for a correct operation of the alternator the voltage can not exceed +/- 5% of the piate value.

Operation in particular settings

If the alternator is going to be used within a sound-proof generating set, make sure that only fresh air enters it. This can be ensured by placing the alterna-tor's air inlet near the external air intake. Moreover, remember that the quantity of air required is:

4 m^3/min. for **E1S10** alternators
5 m^3/min. for **E1S11** alternators
10 m^3/min. for **E1S13** alternators

Bearings

The bearings of the alternators are self lubrificated and therefore they do not require maintenances for a period of more than 5000 hours. When it is nec-essary to proceed to the general overhaul of the generating set it is advisable to wash the bearings with a proper solvent, to remove and to replace the grease reserve. It is possible to use: AGIP GR MW3 - SHELL ALVANIA 3 - MOBIL OIL MOBILUX GREASE 3 or an other equivalent grease.

Alternatore	tipo di cuscinetto	
	Lato accoppiamento	Lato Opp. accoppiamento
E1S 10	6205-2Z-C3	6204-2Z-C3
E1S 11	6207-2Z-C3	6205-2Z-C3
E1S 13	6208-2Z-C3	6305-2Z-C3

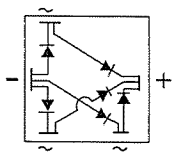
Slip-rings, brush holder and brushes

The set of collector-brush holder-brushes is designed to guarantee a safe and long service. Therefore during the use of the alternator articular operations of maintenance to this syste are not demanded for at least 2000 hours of service for the 2 poles-alternators and 4000 hours for 4 poles alternators.
In case of the de-excitation of the alternator and the consequent irregularity of the electric current supply it is necessary to carry out the following simple operations:

1) Clean the slip ring-brushes and their corrected mechanical position.
2) Check the position of the brushes; they must be lean for all their width, within the surface of rings.
3) Check the brushes and eventually replace them if worn.

Three-phase diode bridge

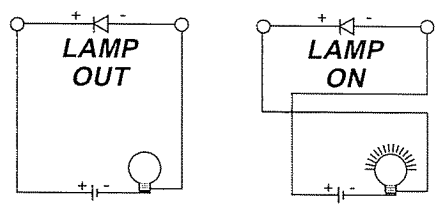
Normally it comes used the three-phase diode bridge for 25A - 800V.



PONTE TRIFASE

Checkout of three-phase diode bridge
The checkout of single diode valves of rectifier bridge can be executed either with an ohmmeter or with a battery and relative lamp as described here below.
A diode valve works regularly when:

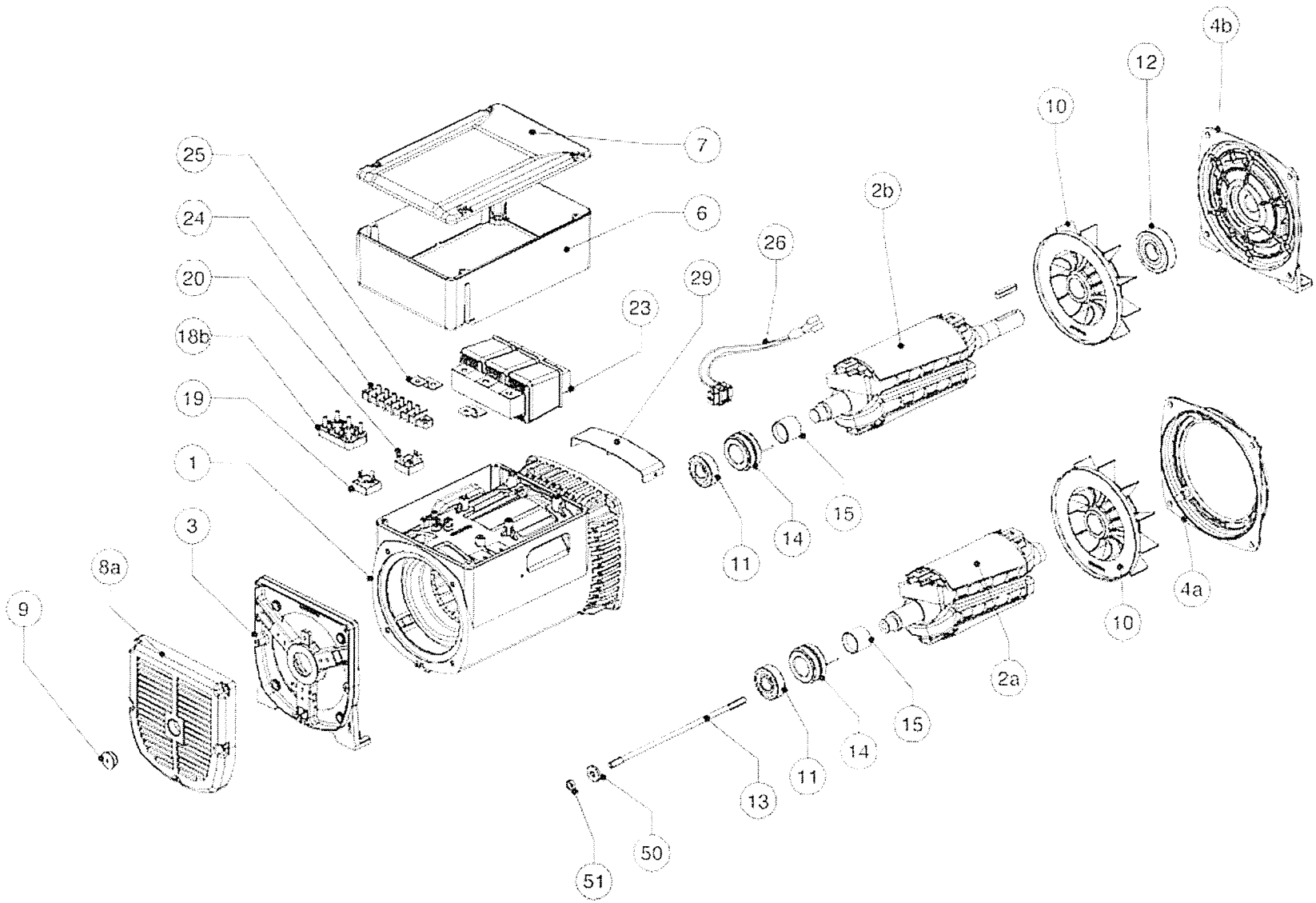
- the resistance, calculated with an ohmmeter, is very low in one sense and very high in the other.
- with battery and lamp, it is verified that the ignition of the lamp is possible only with one of the two available connections, as shown below:



Note for disassembly: Before extracting the rotor from the case it is necessary to remove the brush-holder.

FAULT	CAUSES	SOLUTION
Alternator does not excite	1) Insufficient residual voltage	1) Excite the rotor using a battery
	2) Connection break	2) Reset the connection
	3) Broken three-phase diode bridge	3) Replace three-phase diode bridge
	4) Insufficient speed	4) Adjust speed regulator
	5) Windings breakdown	5)Check winding resistance and replace damaged part
	6) Poor contact with the brushes	6) Clean and check the collector
Low no-load voltage	1) Reduced speed	1) Reduce capacitor capacity
	2) Poor brushes contact	2) Reset speed for drive motor
	3) Winding failure	3) Check resistance and replace damaged part
	4) Insufficient speed	4) Replace three-phase diode bridge
	5) Windings breakdown	5) Adjust the height of air gap
Correct no-load voltage but too low with load	1) Low speed with load	1) Adjust speed regulator
	2) Failed compound	2) Check the compound and eventually replace it
	3) Defective winding rotor	3) Check winding resistance and replace the rotor if it is broken
	4) Load is too high	4) Reduce the load
Correct no-load voltage but too high with load	1) Appliances with capacitors on the load	1) Reduce revolving speed
	2) Air gap of compound too excessive	2) Reduce air gap of compound
	3) Defective winding compound	3) Check winding resistance and replace the compound if it is broken
	4) Wrong connection of phases	4) Check and adjust the connection of phases
Unstable voltage	1) Rotary mass too small	1) Increase the flywheel of the primary motor
	2) Uneven speed	2) Check and repair speed regulator
	3) Poor contact on collector	3) Check and clean the slip-ring and the brushes
Noisy Functioning	1) Bad coupling	1) Check and correct coupling
	2) Short circuit in windings or load	2) Check windings and loads
	3) Faulty bearing	3) Replace faulty bearing

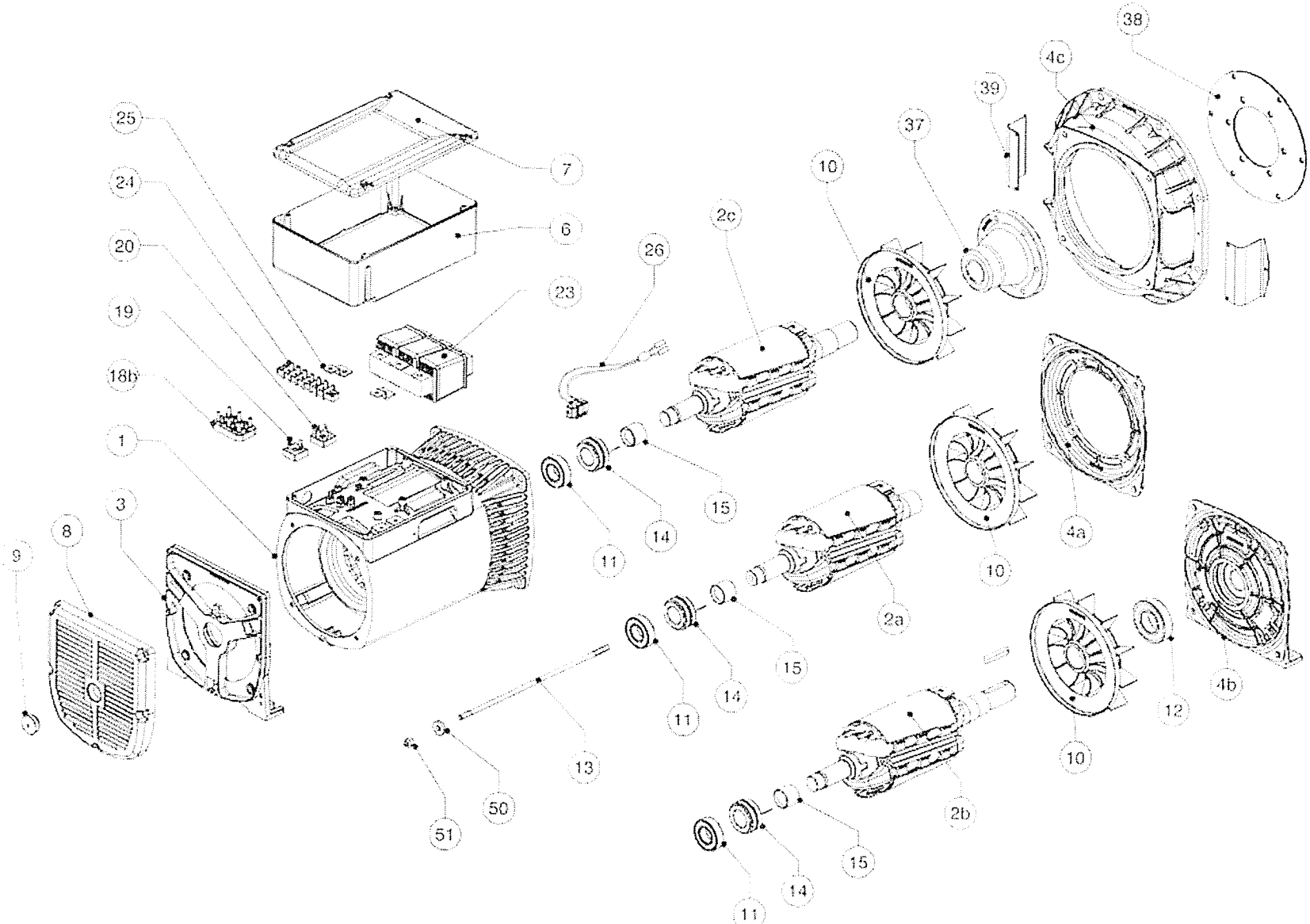
RICAMBI - SPARE PARTS - REPUESTOS - PIÉCES DE RECHANGE - ERSATZTEILE
E1S10M - E1S10L



RICAMBI - SPARE PARTS - REPUESTOS - PIÈCES DE RECHANGE - ERSATZTEILE

Nº	COD.	RICAMBI	SPARE PARTS	LISTA DE REPUESTOS	PIECES DETACHEES	ERSATZTEILE
1	E10CA008AA	CARC. CON STATORE 230/400V 50HZ 5,5 KVA	FRAME WITH STATOR 230/400V 50HZ 5,5KVA	CARC. CON ESTATOR 230/400V 50HZ 5,5KVA	CARC. AVEC STATOR 230/400V 50HZ 5,5 KVA	GEHÉUSE MIT STATOR 230/400V 50HZ 5,5 KVA
1	E10CA009AA	CARC. CON STATORE 230/400V 50HZ 7 KVA	FRAME WITH STATOR 230/400V 50HZ 7KVA	CARC. CON ESTATOR 230/400V 50HZ 7KVA	CARC. AVEC STATOR 230/400V 50HZ 7 KVA	GEHÉUSE MIT STATOR 230/400V 50HZ 7 KVA
1	E10CA010AA	CARC. CON STATORE 230/400V 50HZ 9 KVA	FRAME WITH STATOR 230/400V 50HZ 9KVA	CARC. CON ESTATOR 230/400V 50HZ 9KVA	CARC. AVEC STATOR 230/400V 50HZ 9 KVA	GEHÉUSE MIT STATOR 230/400V 50HZ 9 KVA
1	E10CA008AP	CARC. CON STATORE 230/400V 60HZ 7 KVA	FRAME WITH STATOR 230/400V 60HZ 7KVA	CARC. CON ESTATOR 230/400V 60HZ 7KVA	CARC. AVEC STATOR 230/400V 60HZ 7 KVA	GEHÉUSE MIT STATOR 230/400V 60HZ 7 KVA
1	E10CA009AP	CARC. CON STATORE 230/400V 60HZ 8,5 KVA	FRAME WITH STATOR 230/400V 60HZ 8,5KVA	CARC. CON ESTATOR 230/400V 60HZ 8,5KVA	CARC. AVEC STATOR 230/400V 60HZ 8,5 KVA	GEHÉUSE MIT STATOR 230/400V 60HZ 8,5 KVA
1	E10CA010AP	CARC. CON STATORE 230/400V 60HZ 11 KVA	FRAME WITH STATOR 230/400V 60HZ 11KVA	CARC. CON ESTATOR 230/400V 60HZ 11KVA	CARC. AVEC STATOR 230/400V 60HZ 11 KVA	GEHÉUSE MIT STATOR 230/400V 60HZ 11 KVA
2a	-	INDUTT. ROTANTE B9 5,5 KVA/50HZ - 7 KVA/60HZ	B9 ROTATING INDUCT. 5,5 KVA/50HZ- 7 KVA/60HZ	INDUCT. ROTANTE B9 5,5 KVA/50HZ- 7 KVA/60HZ	ROUE POLAIRE B9 5,5 KVA/50HZ - 7 KVA/60HZ	DREHANKER B9 5,5 KVA/50HZ - 7 KVA/60HZ
2a	-	INDUTT. ROTANTE B9 7 KVA/50HZ - 8,5 KVA/60HZ	B9 ROTATING INDUCT. 7 KVA/50HZ- 8,5 KVA/60HZ	INDUCT. ROTANTE B9 7 KVA/50HZ- 8,5 KVA/60HZ	ROUE POLAIRE B9 7 KVA/50HZ - 8,5 KVA/60HZ	DREHANKER B9 7 KVA/50HZ - 8,5 KVA/60HZ
2a	-	INDUTT. ROTANTE B9 9 KVA/50HZ - 11 KVA/60HZ	B9 ROTATING INDUCT. 9 KVA/50HZ- 11 KVA/60HZ	INDUCT. ROTANTE B9 9 KVA/110HZ- 11 KVA/60HZ	ROUE POLAIRE B9 9 KVA/50HZ - 11 KVA/60HZ	DREHANKER B9 9 KVA/50HZ - 11 KVA/60HZ
2b	E10RE016AR	INDUTT. ROTANTE B14 5,5 KVA/50HZ - 7 KVA/60HZ	B14 ROTATING INDUCT. 5,5 KVA/50HZ- 7 KVA/60HZ	INDUCT. ROTANTE B14 5,5 KVA/50HZ- 7 KVA/60HZ	ROUE POLAIRE B14 5,5 KVA/50HZ - 7 KVA/60HZ	DREHANKER B14 5,5 KVA/50HZ - 7 KVA/60HZ
2b	E10RE017AR	INDUTT. ROTANTE B14 7 KVA/50HZ - 8,5 KVA/60HZ	B14 ROTATING INDUCT. 7 KVA/50HZ- 8,5 KVA/60HZ	INDUCT. ROTANTE B14 7 KVA/50HZ- 8,5 KVA/60HZ	ROUE POLAIRE B14 7 KVA/50HZ - 8,5 KVA/60HZ	DREHANKER B14 7 KVA/50HZ - 8,5 KVA/60HZ
2b	E10RE018AR	INDUTT. ROTANTE B14 9 KVA/50HZ - 11 KVA/60HZ	B14 ROTATING INDUCT. 9 KVA/50HZ- 11 KVA/60HZ	INDUCT. ROTANTE B14 9 KVA/110HZ- 11 KVA/60HZ	ROUE POLAIRE B14 9 KVA/50HZ - 11 KVA/60HZ	DREHANKER B14 9 KVA/50HZ - 11 KVA/60HZ
3a	E10SE007A	SCUDO POSTERIORE B3/B9	REAR SHIELD B3/B9	TAPA POSTERIOR B3/B9	FLASQUE ARRIERE B3/B9	HINTERER LAGERSCHILD B3/B9
3b	E10SE005A	SCUDO POSTERIORE B9	REAR SHIELD B9	TAPA POSTERIOR B9	FLASQUE ARRIERE B9	HINTERER LAGERSCHILD B9
3c	E10SE001A	SCUDO POSTERIORE B9 PER E1S 9 KVA	REAR SHIELD B3/B9 FOR E1S 9KVA	TAPA POSTERIOR B3/B9 PARA E1S 9KVA	FLASQUE ARRIERE B9 POUR E1S 9 KVA	HINTERER LAGERSCHILD B9 FÖR E1S 9 KVA
3d	E10SE003A	SCUDO POSTERIORE B3/B9 PER E1S 9KVA	REAR SHIELD B9 FOR E1S 9KVA	TAPA POSTERIOR B9 PARA E1S 9KVA	FLASQUE ARRIERE B3/B9 POUR E1S 9KVA	HINTERER LAGERSCHILD B3/B9 FÖR E1S 9KVA
4a	E10SB003B	SCUDO ANTERIORE d.105	B9 FRONT COVER d.105	TAPA ANTERIOR B9 d.105	FLASQUE AVANT d.105	VORDERER LAGERSCHILD d.105
4a	E10SB005B	SCUDO ANTERIORE d.146 J609b	B9 FRONT COVER d.146 J609b	TAPA ANTERIOR B9 d.146 J609b	FLASQUE AVANT d.146 J609b	VORDERER LAGERSCHILD d.146 J609b
4a	E10SB009B	SCUDO ANTERIORE d.41.25 J609a	B9 FRONT COVER d.41.25 J609a	TAPA ANTERIOR B9 d.41.25 J609a	FLASQUE AVANT d.41.25 J609a	VORDERER LAGERSCHILD d.41.25 J609a
4b	E10SB001B	SCUDO ANTERIORE B3/B14	FRONT COVER B3/B14	TAPA ANTERIOR B3/B14	FLASQUE AVANT B3/B14	VORDERER LAGERSCHILD B3/B14
6	E10BT000C	SCATOLA BASETTA	TERMINAL BOX	CAJA DE BORNES	BOITE A BORNES	KLEMMENKASTEN
7	E10BT001C	COPRISCATOLA BASETTA	TERMINAL BOX COVER	TAPA CAJA DE BORNES	COUVERCLE BOITE A BORNE	OBERER DECKEL
8a	E10KA007C	CUFFIA POSTERIORE BASSA	STANDARD REAR COVER	PROTECCION POSTERIOR BAJA	COIFFE DE PROTECTION ARRIERE	HINTERE HAUBE
8b	E10KA008C	CUFFIA DI PROTEZIONE POSTERIORE	REAR COVER	PROTECCION POSTERIOR	COUVERCLE ARRIÖRE	HINTERE HAUBE
8c	-	CUFFIA DI PROTEZIONE POSTERIORE FORATA	DRILLED REAR COVER	PROTECCION POSTERIOR ALTA PERFORADA	COUVERCLE ARRIÖRE PERCEE	HINTERE HAUBE HINTERER FÖR ZUBEHÖR DURCHBOHRT
9	E10KA010A	TAPPO POSTERIORE	REAR PLUG	TAPON	BOUCHON POSTERIEUR	HINTERER VERSCHLUSS
10	E10VE000B	VENTOLA	FAN	VENTILADOR	VENTILATEUR	LÖFTER
11	EX411434320	CUSCINETTO POSTERIORE	REAR BEARING	COJINETE POSTERIOR	ROULEMENT ARRIERE	LAGER KUPPLUNGSGEGENSEITE (HINTEN)
12	EX411434325	CUSCINETTO ANTERIORE	FRONT BEARING	COJINETE ANTERIOR	ROULEMENT AVANT	LAGER KUPPLUNGSSEITE (VORNE)
13	-	TIRANTE CENTRALE	CENTRAL TIE ROD	TIRANTE DE LA TAPA	TIRANT CENTRAL	MITTELSTANGE
13a	E10TK020A	BUSSOLA PER TIRANTE CENTRALE(SOLO PER CONO 30)	BUSH FOR TIE ROD (ONLY FOR CONE 30)	CILINDRO ROSCADO (PARA C.30)	DOUILLE POUR TIRANT CENTRAL (SEUL. POUR CONE 30)	BUCHSE FÖR MITTELSTANGE (FÖR KONUS 30)
14	E10KA000A	COLLETTORE A 2 ANELLI	SLIP RING	COLECTOR DE ANILLOS	COLLECTEUR A DEUX BAGUES	KOLLETOR
15	E10KA015A	BUSSOLA ISOLANTE	ISOLATING BUSH	ANILLO AISLADOR	DOUILLE ISOLANTE	ISOLIEREND BÖCHSE
18b	EX561201005	MORSETTIERA PRINCIPALE A 6 PIOLI	6 STUD TERMINAL BOARD	PLACA DE BORNES PRINCIPAL	BORNIER A 6 BORNES	6-POLIGES KLEMMENBRETT
19	EX541805080	PONTE A DIODI MONOFASE	SINGLE PHASE BRIDGE	PUENTE RECTIFICADOR MONOFASICO	PONT REDRESSEUR MONOPHASE	EINPHASIGE-DIODENBRÖCKE
20	EX541802080	PONTE A DIODI TRIFASE	THREE PHASE BRIDGE	PUENTE RECTIFICADOR TRIFASICO	PONT REDRESSEUR TRIPHASE	DREIPHASEN-DIODENBRÖCKE
23	E10TA003AA	COMPOUND S5 PER 5,5 KVA	COMPOUND S5 FOR 5,5 KVA	COMPOUND S5 PARA 5,5 KVA	COMPOUND S5 POUR 5,5 KVA	KOMPOUND S5 FOR 5,5 KVA
23	E10TA004AA	COMPOUND S7 PER 7 KVA	COMPOUND S7 FOR 7 KVA	COMPOUND S7 PARA 7 KVA	COMPOUND S7 POUR 7 KVA	KOMPOUND S7 FOR 7 KVA
23	E10TA005AA	COMPOUND S9 PER 9 KVA	COMPOUND S9 FOR 9 KVA	COMPOUND S9 PARA 9 KVA	COMPOUND S9 POUR 9 KVA	KOMPOUND S9 FOR 9 KVA
24	E10KA011A	MORSETTIERA AUSILIARIA	AUXILIARY TERMINAL BOARD	BORNERA AUXILIAR	BORNIER AUXILIAIRE	NEBEN-KLEMMENBRETT
25	E10KA014A	SUPPORTI MORSETTIERA	TERMINAL BOARD SUPPORTS	SOPORTES DE BORNERA AUXILIAR	SUPPORTS POUR BORNIER	supporti per KLEMMENBRETT
26	E13KA018A	PORTASPAZZOLE COMPLETO	COMPLETE BRUSH HOLDER	PORTAESCOBILLAS COMPLETO	PORTE-BALAIS COMPLET	BÖRSTENHALTER
29	E10KA016B	PROTEZIONE ANTERIORE IP21	IP 21 COVER	PROTECCION ANTERIOR IP21	PROTECTION IP21	SCHUTZ IP 21

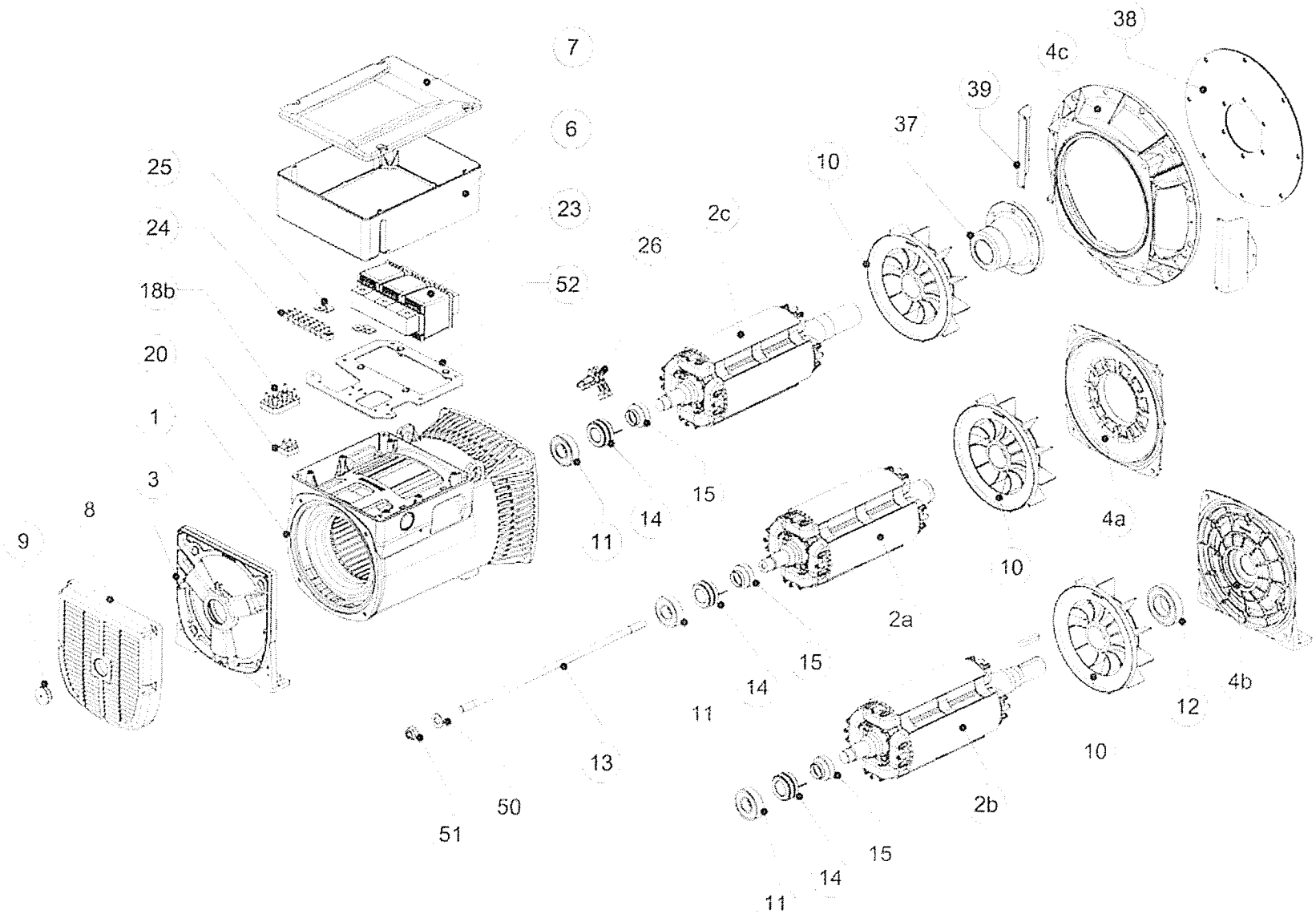
RICAMBI - SPARE PARTS - REPUESTOS - PIÉCES DE RECHANGE - ERSATZTEILE
E1S11M



RICAMBI - SPARE PARTS - REPUESTOS - PIÉCES DE RECHANGE - ERSATZTEILE

Nº	COD.	RICAMBI	SPARE PARTS	LISTA DE REPUESTOS	PIECES DETACHEES	ERSATZTEILE
1	E11CA004AA	CARC. CON STATORE 230/400 50HZ 10 KVA	FRAME WITH STATOR 230/400V 50HZ 10 KVA	CARC. CON ESTATOR 230/400V 50HZ 10 KVA	CARCASSE AVEC STATOR 230/400V 50HZ 10 KVA	GEHÄUSE MIT STATOR 230/400 50HZ 10 KVA
1	E11CA005AA3	CARC. CON STATORE 230/400 50HZ 11,5 KVA	FRAME WITH STATOR 230/400V 50HZ 11,5 KVA	CARC. CON ESTATOR 230/400V 50HZ 11,5 KVA	CARCASSE AVEC STATOR 230/400V 50HZ 11,5 KVA	GEHÄUSE MIT STATOR 230/400 50HZ 11,5 KVA
1	E11CA006AA	CARC. CON STATORE 230/400 50HZ 13,5 KVA	FRAME WITH STATOR 230/400V 50HZ 13,5 KVA	CARC. CON ESTATOR 230/400V 50HZ 13,5 KVA	CARCASSE AVEC STATOR 230/400V 50HZ 13,5 KVA	GEHÄUSE MIT STATOR 230/400 50HZ 13,5 KVA
1	E11CA004AP	CARC. CON STATORE 230/400 60HZ 12,5 KVA	FRAME WITH STATOR 230/400V 60HZ 12,5 KVA	CARC. CON ESTATOR 230/400V 60HZ 12,5 KVA	CARCASSE AVEC STATOR 230/400V 60HZ 12,5 KVA	GEHÄUSE MIT STATOR 230/400 60HZ 12,5 KVA
1	E11CA005AAP3	CARC. CON STATORE 230/400 60HZ 14 KVA	FRAME WITH STATOR 230/400V 60HZ 14 KVA	CARC. CON ESTATOR 230/400V 60HZ 14 KVA	CARCASSE AVEC STATOR 230/400V 60HZ 14 KVA	GEHÄUSE MIT STATOR 230/400 60HZ 14 KVA
1	E11CA006AP	CARC. CON STATORE 230/400 60HZ 16,5 KVA	FRAME WITH STATOR 230/400V 60HZ 16,5 KVA	CARC. CON ESTATOR 230/400V 60HZ 16,5 KVA	CARCASSE AVEC STATOR 230/400V 60HZ 16,5 KVA	GEHÄUSE MIT STATOR 230/400 60HZ 16,5 KVA
2a	-	INDUTT. ROTAN. B9 10 KVA/50HZ - 12,5 KVA/60HZ	B9 ROTAT. INDUCT. 10 KVA/50HZ- 12,5 KVA/60HZ	INDUCT. ROTAN. B9 10 KVA/50HZ- 12,5 KVA/60HZ	ROUE POLAIRE B9 10 KVA/50HZ - 12,5 KVA/60HZ	DREHANKER B9 10 KVA/50HZ - 12,5 KVA/60HZ
2a	-	INDUTT. ROTAN. B9 11,5 KVA/50HZ - 14 KVA/60HZ	B9 ROTAT. INDUCT. 11,5 KVA/50HZ- 14 KVA/60HZ	INDUCT. ROTAN. B9 11,5 KVA/50HZ- 14 KVA/60HZ	ROUE POLAIRE B9 11,5 KVA/50HZ - 14 KVA/60HZ	DREHANKER B9 11,5 KVA/50HZ - 14 KVA/60HZ
2a	-	INDUTT. ROTAN. B9 13,5 KVA/50HZ - 16,5 KVA/60HZ	B9 ROTAT. INDUCT. 13,5 KVA/50HZ- 16,5 KVA/60HZ	INDUCT. ROTAN. B9 13,5 KVA/50HZ- 16,5 KVA/60HZ	ROUE POLAIRE B9 13,5 KVA/50HZ - 16,5 KVA/60HZ	DREHANKER B9 13,5 KVA/50HZ - 16,5 KVA/60HZ
2b	E11RE015AQ	INDUTT. ROTAN. B14 10 KVA/50HZ - 12,5 KVA/60HZ	B14 ROTAT. INDUCT. 10 KVA/50HZ- 12,5 KVA/60HZ	INDUCT. ROTAN. B14 10 KVA/50HZ- 12,5 KVA/60HZ	ROUE POLAIRE B14 10 KVA/50HZ - 12,5 KVA/60HZ	DREHANKER B14 10 KVA/50HZ - 12,5 KVA/60HZ
2b	E11RE015AR	INDUTT. ROTAN. B14 11,5 KVA/50HZ - 14 KVA/60HZ	B14 ROTAT. INDUCT. 11,5 KVA/50HZ- 14 KVA/60HZ	INDUCT. ROTAN. B14 11,5 KVA/50HZ- 14 KVA/60HZ	ROUE POLAIRE B14 11,5 KVA/50HZ - 14 KVA/60HZ	DREHANKER B14 11,5 KVA/50HZ - 14 KVA/60HZ
2b	E11RE016AR	INDUTT. ROTAN. B14 13,5 KVA/50HZ - 16,5 KVA/60HZ	B14 ROTAT. INDUCT. 13,5 KVA/50HZ- 16,5 KVA/60HZ	INDUCT. ROTAN. B14 13,5 KVA/50HZ- 16,5 KVA/60HZ	ROUE POLAIRE B14 13,5 KVA/50HZ - 16,5 KVA/60HZ	DREHANKER B14 13,5 KVA/50HZ - 16,5 KVA/60HZ
2c	E11RE020AQ	INDUTT. ROTAN. MD35 10 KVA/50HZ - 12,5 KVA/60HZ	MD35 ROTAT. INDUCT. 10 KVA/50HZ- 12,5 KVA/60HZ	INDUCT. ROTAN. MD35 10 KVA/50HZ- 12,5 KVA/60HZ	ROUE POLAIRE MD35 10 KVA/50HZ - 12,5 KVA/60HZ	DREHANKER MD35 10 KVA/50HZ - 12,5 KVA/60HZ
2c	E11RE020AR	INDUTT. ROTAN. MD35 11,5 KVA/50HZ - 14 KVA/60HZ	MD35 ROTAT. INDUCT. 11,5 KVA/50HZ- 14 KVA/60HZ	INDUCT. ROTAN. MD35 11,5 KVA/50HZ- 14 KVA/60HZ	ROUE POLAIRE MD35 11,5 KVA/50HZ - 14 KVA/60HZ	DREHANKER MD35 11,5 KVA/50HZ - 14 KVA/60HZ
2c	E11RE020AQ	INDUTT. ROTAN. MD35 13,5 KVA/50HZ - 16,5 KVA/60HZ	MD35 ROTAT. INDUCT. 13,5 KVA/50HZ- 16,5 KVA/60HZ	INDUCT. ROTAN. MD35 13,5 KVA/50HZ- 16,5 KVA/60HZ	ROUE POLAIRE MD35 13,5 KVA/50HZ - 16,5 KVA/60HZ	DREHANKER MD35 13,5 KVA/50HZ - 16,5 KVA/60HZ
3	E11SE001A	SCUDO POSTERIORE B3/B9	REAR SHIELD B3/B9	TAPA POSTERIOR B3/B9	FLASQUE ARRIERE B3/B9	HINTERER LAGERSCHILD B3/B9
4a	E11SB005B	SCUDO ANTERIORE d.105	FRONT COVER d.105	TAPA ANTERIOR d.105	FLASQUE AVANT d.105	VORDERER LAGERSCHILD d.105
4a	E11SB007B	SCUDO ANTERIORE d.146 J609b	FRONT COVER d.146 J609b	TAPA ANTERIOR d.146 J609b	FLASQUE AVANT d.146 J609b	VORDERER LAGERSCHILD d.146 J609b
4a	E11SB009B	SCUDO ANTERIORE d.163 J609b	FRONT COVER d.163 J609b	TAPA ANTERIOR d.163 J609b	FLASQUE AVANT d.163 J609b	VORDERER LAGERSCHILD d.163 J609b
4a	E11SB011B	SCUDO ANTERIORE d.110	FRONT COVER d.110	TAPA ANTERIOR d.110	FLASQUE AVANT d.110 J609b	VORDERER LAGERSCHILD d.110
4a	E11SB012B	SCUDO ANTERIORE d.125	FRONT COVER d.125	TAPA ANTERIOR d.125	FLASQUE AVANT d.125 J609b	VORDERER LAGERSCHILD d.125
4a	E11SB013B	SCUDO ANTERIORE d.177,8 J609b	FRONT COVER d.178,8 J609b	TAPA ANTERIOR d.178,8 J609b	FLASQUE AVANT d.178,8 J609b	VORDERER LAGERSCHILD d.177,8 J609b
4b	E11SB001B	SCUDO ANTERIORE B3/B14	FRONT COVER B3/B14	TAPA ANTERIOR B3/B14	FLASQUE AVANT B3/B14	VORDERER LAGERSCHILD B3/B14
4c	E11SB003B	SCUDO ANTERIORE MD35/5	MD 35/5 FRONT COVER	TAPA ANTERIOR MD35/5	FLASQUE AVANT MD35/5	VORDERER LAGERSCHILD MD35/5
6	E10BT000C	SCATOLA BASETTA	TERMINAL BOX	CAJA DE BORNES	BOITE A BORNES	KLEMMENKASTEN
7	E10BT001C	COPRISCATOLA BASETTA	TERMINAL BOX COVER	TAPA CAJA DE BORNES	COUVERCLE BOITE A BORNE	OBERER DECKEL
8	E11KA001C	CUFFIA POSTERIORE	REAR COVER	PROTECCION POSTERIOR	COIFFE DE PROTECTION ARRIERE	HINTERE HAUBE
9	E11KA005A	TAPPO POSTERIORE	REAR PLUG	TAPON	BOUCHON POSTERIEUR	HINTERER VERSCHLUSS
10	E11VE000B	VENTOLA	FAN	VENTILADOR	VENTILATEUR	LÜFTER
11	EX411434325	CUSCINETTO POSTERIORE	REAR BEARING	COJINETE POSTERIOR	ROULEMENT ARRIERE	LAGER KUPPLUNGSGEGENSEITE (HINTEN)
12	EX411434335	CUSCINETTO ANTERIORE	FRONT BEARING	COJINETE ANTERIOR	ROULEMENT AVANT	LAGER KUPPLUNGSSEITE (VORNE)
13	-	TIRANTE CENTRALE	TIE ROD	TIRANTE DE LA TAPA	TIRANT CENTRAL	MITTELSTANGE
13a	E11TK010A	BUSSOLA PER TIRANTE CENTRALE (SOLO PER CONO 38)	BUSH THREADED (ONLY FOR CONE 38)	CILINDRO ROSCADO (PARA CONO 38)	DOUILLE POUR TIRANT CENTRAL (SEULEMENT POUR C. 38)	BUCHSE FÜR MITTELSTANGE (FÜR KONUS 30)
14	E10KA000A	COLLETTORE A 2 ANELLI	SLIP RING	COLECTOR DE ANILLOS	COLLECTEUR A DEUX BAGUES	KOLLETOR
15	E10KA015A	BUSSOLA ISOLANTE	ISOLATING BUSH	ANILLO AISLADOR	DOUILLE ISOLANTE	ISOLIEREND BÜCHSE
18b	EX561201005	MORSETTIERA PRINCIPALE A 6 PIOLI	6 STUD TERMINAL BOARD	PLACA DE BORNES PRINCIPAL	BORNIER A 6 BORNES	6-POLIGES KLEMMENBRETT
19	EX541805080	PONTE A DIODI MONOFASE	SINGLE PHASE BRIDGE	PUENTE RECTIFICADOR MONOFASICO	PONT REDRESSEUR MONOPHASE	EINPHASIGE-DIODENBRÜCKE
20	EX541802080	PONTE A DIODI TRIFASE	THREE PHASE BRIDGE	PUENTE RECTIFICADOR TRIFASICO	PONT REDRESSEUR TRIPHASE	DREIPHASEN-DIODENBRÜCKE
23	E11TA003AA	COMPOUND PER 10 KVA	COMPOUND FOR 10 KVA	COMPOUND PARA 10 KVA	COMPOUND S5 POUR 10 KVA	KOMPOUND FÜR 10 KVA
23	E11TA004AA	COMPOUND PER 11,5 KVA	COMPOUND FOR 11,5 KVA	COMPOUND PARA 11,5 KVA	COMPOUND S7 POUR 11,5 KVA	KOMPOUND FÜR 11,5 KVA
23	E11TA005AA	COMPOUND PER 13,5 KVA	COMPOUND FOR 13,5 KVA	COMPOUND PARA 13,5 KVA	COMPOUND S9 POUR 13,5 KVA	KOMPOUND FÜR 13,5 KVA
24	E10KA011A	MORSETTIERA AUSILIARIA	AUXILIARY TERMINAL BOARD	BORNERA AUXILIAR	BORNIER AUXILIAIRE	NEBEN-KLEMMENBRETT
25	E10KA014A	SUPPORTI MORSETTIERA	TERMINAL BOARD SUPPORTS	SOPORTES DE BORNERA AUXILIAR	SUPPORTS POUR BORNIER	supporti per KLEMMENBRETT
26	E10KA002A	PORTASPAZZOLE COMPLETO	BRUSH HOLDER	PORTAESCOBILLAS COMPLETO	PORTE-BALAIS COMPLET	BÜRSTENHALTER
29	E10KA016B	PROTEZIONE ANTERIORE IP21	IP 21 COVER	PROTECCION ANTERIOR IP21	PROTECTION IP21	SCHUTZ IP 21
37	E11GE001A	MOZZO GIUNTO	COUPLING HUB	MOJON	MOYEU JOINT	KUPPLUNGSNABE
38	E13GE201A	DISCO SAE 6 1/2	SAE 6 1/2 COUPLING DISC PLATE	DISCO SAE 6 1/2	DISQUE SAE 6 1/2	SCHEIBENKUPPLUNG SAE
39	E11KA006A	PROTEZIONE SCUDO MD35/5	MD35/5 FRONT COVER PROTECTION	PROTECCION TAPA ANTERIOR MD35/5	PROTECTION FLASQUE AVANT MD35/5	SCHUTZ FÜR ZUBEHÖR

RICAMBI - SPARE PARTS - REPUESTOS - PIÉCES DE RECHANGE - ERSATZTEILE
E1S13S/2 - E1S13S/4 - E1S13M/2 - E1S13M/4



RICAMBI - SPARE PARTS - REPUESTOS - PIÉCES DE RECHANGE - ERSATZTEILE

Nº	COD.	RICAMBI	SPARE PARTS	LISTA DE REPUESTOS	PIECES DETACHEES	ERSATZTEILE
1	*	CARCASSA CON STATORE	FRAME WITH STATOR	CARCAZA CON ESTATOR	CARCASSE AVEC STATOR	GEHÄUSE MIT STATOR
2a	*	INDUTTORE ROTANTE B9	B9 ROTATING INDUCTOR	INDUCTOR ROTANTE B9	ROUE POLAIRE B9	DREHANKER B9
2b	*	INDUTTORE ROTANTE B14	B14 ROTATING INDUCTOR	INDUCTOR ROTANTE B14	ROUE POLAIRE B14	DREHANKER B14
2c	*	INDUTTORE ROTANTE MD35	MD35 ROTATING INDUCTOR	INDUCTOR ROTANTE MD35	ROUE POLAIRE MD35	DREHANKER MD35
3	E13SE001A	SCUDO POSTERIORE B3/B9	REAR SHIELD B3/B9	TAPA POSTERIOR B3/B9	FLASQUE ARRIERE B3/B9	HINTERER LAGERSCHILD
4a	E13SB009B	SCUDO ANTERIORE d.105	FRONT COVER d.105	TAPA ANTERIOR d.105	FLASQUE AVANT d.105	VORDERER LAGERSCHILD d.105
4a	E13SB013B	SCUDO ANTERIORE d.146 J609b	FRONT COVER d.146 J609b	TAPA ANTERIOR d.146 J609b	FLASQUE AVANT d.146 J609b	VORDERER LAGERSCHILD d.146 J609b
4a	E13SB015B	SCUDO ANTERIORE d.163,6 J609b	FRONT COVER d.163,6 J609b	TAPA ANTERIOR d.163,6 J609b	FLASQUE AVANT d.163 J609b	VORDERER LAGERSCHILD d.163,6 J609b
4a	E13SB016B	SCUDO ANTERIORE d.177,8 J609b	FRONT COVER d.177,8 J609b	TAPA ANTERIOR d.177,8 J609b	FLASQUE AVANT d.177,8 J609b	VORDERER LAGERSCHILD d.177,8 J609b
4b	E13SB007B	SCUDO ANTERIORE B3/B14	FRONT COVER B3/B14	TAPA ANTERIOR B3/B14	FLASQUE AVANT B3/B14	VORDERER LAGERSCHILD B3/B14
4c	E13SB001B	SCUDO ANTERIORE SAE 5	SAE 5 FRONT COVER	TAPA ANTERIOR SAE 5	FLASQUE AVANT MD35/5	VORDERER LAGERSCHILD SAE 5
4c	E13SB003B	SCUDO ANTERIORE SAE 4	SAE 4 FRONT COVER	TAPA ANTERIOR SAE 4	FLASQUE AVANT MD35/4	VORDERER LAGERSCHILD SAE 4
4c	E13SB005B	SCUDO ANTERIORE SAE 3	SAE 3 FRONT COVER	TAPA ANTERIOR SAE 3	FLASQUE AVANT MD35/3	VORDERER LAGERSCHILD SAE 3
6	E13BT000D	SCATOLA BASETTA	TERMINAL BOX	CAJA DE BORNES	BOITE A BORNES	KLEMMENKASTEN
7	E13BT001D	COPRISCATOLA BASETTA	TERMINAL BOX COVER	TAPA CAJA DE BORNES	COUVERCLE BOITE A BORNE	OBERER DECKEL
8	E13KA000D	CUFFIA DI PROTEZIONE POSTERIORE	REAR COVER	PROTECCION POSTERIOR	COIFFE DE PROTECTION ARRIERE	HINTERE HAUBE
9	E13KA005A	TAPPO POSTERIORE	REAR PLUG	TAPON	BOUCHON POSTERIEUR	HINTERER VERSCHLUSS
10	E13VE000C	VENTOLA	FAN	VENTILADOR	VENTILATEUR	LÜFTER
11	EX411465325	CUSCINETTO POSTERIORE	REAR BEARING	COJINETE POSTERIOR	ROULEMENT ARRIERE	LAGER KUPPLUNGSGEGENSEITE (HINTEN)
12	EX411434340	CUSCINETTO ANTERIORE	FRONT BEARING	COJINETE ANTERIOR	ROULEMENT AVANT	LAGER KUPPLUNGSSEITE (VORNE)
13	*	TIRANTE CENTRALE	TIE ROD	TIRANTE DE LA TAPA	TIRANT CENTRAL	MITTELSTANGE
14	E10KA000A	COLLETTORE A 2 ANELLI	SLIP RING	COLECTOR DE ANILLOS	COLLECTEUR A DEUX BAGUES	KOLLETOR
15	E13KA014A	BUSSOLA ISOLANTE	ISOLATING BUSH	ANILLO AISLADOR	DOUILLE ISOLANTE	ISOLIEREND BÜCHSE
18b	EX561202006	MORSETTIERA PRINCIPALE A 6 PIOLI	6 STUD TERMINAL BOARD	PLACA DE BORNES PRINCIPAL	BORNIER A 6 BORNES	6-POLIGES KLEMMENBRETT
20	EX541802080	PONTE A DIODI TRIFASE	THREE PHASE BRIDGE	PUENTE RECTIFICADOR TRIFASICO	PONT REDRESSEUR TRIPHASE	DREIPHASEN-DIODENBRÜCKE
23	*	COMPOUND	COMPOUND	COMPOUND	COMPOUND	KOMPOUND
24	E10KA011A	MORSETTIERA AUSILIARIA	AUXILIARY TERMINAL BOARD	BORNERA AUXILIAR	BORNIER AUXILIAIRE	NEBEN-KLEMMENBRETT
25	E10KA014A	SUPPORTI MORSETTIERA	TERMINAL BOARD SUPPORTS	SOPORTES DE BORNERA AUXILIAR	SUPPORTS POUR BORNIER	supporti per KLEMMENBRETT
26	E13KA018A	PORTASPAZZOLE COMPLETO	BRUSH HOLDER	PORTAESCOBILLAS COMPLETO	PORTE-BALAIS COMPLET	BÜRSTENHALTER
29	E10KA016B	PROTEZIONE ANTERIORE IP21	IP 21 COVER	PROTECCION ANTERIOR IP21	PROTECTION IP21	SCHUTZ IP 21
37	E13GE001A	MOZZO GIUNTO	COUPLING HUB	MOJON	MOYEU JOINT	KUPPLUNGSNABE
38	*	DISCO SAE	SAE COUPLING DISC PLATE	DISCO SAE	DISQUE SAE	SCHEIBENKUPPLUNG SAE
39	*	PROTEZIONE SCUDO MD35	MD 35 FRONT COVER PROTECTION	PROTECCION TAPA ANTERIOR MD35	PROTECTION FLASQUE AVANT MD35/5	SCHUTZ FÜR ZUBEHÖR
51	*	DADO TIRANTE CENTRALE	CENTRAL TIE ROD	TIGE DE RENFORT CENTRAL	TIGE DE RENFORT CENTRAL	dado MITTELSTANGE
52	E13BT005A	PIASTRA COMPOUND	COMPOUND BASE	PLAC PORTE-COMPOUND	BASE PORTA-COMPOUND	piastra COMPOUND

* Specificare codice dell'alternatore e data di produzione
When requesting spare parts please indicate the alternator's code and date of production
Pour demander les pièces detachees, prière de mentionner le code et la date de production
En cada pedido de piezas de repuestos especificar el código y la fecha de producción de la máquina
Bei Ersatzteilbestellung bitte immer die Teilbenennung des Code und den Datum der Produktion des Wechselstromgenerators angeben

(IT)

DICHIARAZIONE DI CONFORMITÀ

Linz Electric Srl, con sede a San Bonifacio (VR) in Via E. Fermi, 16 dichiara sotto la propria responsabilità che gli alternatori sincroni trifase della serie **E1S** e monofase della serie **E1C** da essa prodotti sono conformi ai requisiti essenziali di sicurezza previsti dalle seguenti direttive:

- **73/23 CEE**
  (Direttiva Bassa Tensione)
- **EMC 89/336 CEE**
  (Compatibilità Elettromagnetica)
- **98/037 CEE**
  (Direttiva Macchine)

Tali alternatori sono costruiti in osservanza delle norme **EN 60034-1** (Norme sulle macchine elettriche rotanti), **EN 50081-1, EN 50082-1.**

Gli alternatori oggetto della presente dichiarazione non possono essere messi in servizio prima che le macchine in cui saranno assemblati siano state dichiarate conformi alle disposizioni della direttiva macchine ad esse relativa.

Arcole, 22 Ottobre 2003

Linz Electric Srl
Amministratore Unico
Silvano Pedrollo

(EN)

CONFORMITY DECLARATION

Linz Electric Srl located in San Bonifacio (VR) - Via E. Fermi, 16 declares under its responsibility that synchronous three-phase alternators of **E1S** series and single-phase of **E1C** series of its production are in conformity with essential safety requirements according to the following directives:

- **73/23 CEE**
  (Low Tension Directive)
- **EMC 89/336 CEE**
  (Electromagnetic Compatibility)
- **98/037 CEE**
  (Machines Directive)

These alternators are manufactured according to **EN 60034-1** norms (Norms on Electric rotating machines), E**N 50081-1, EN 50082-1**.

The above mentioned alternators cannot be put into service before the machines where they are intended to be assembled have been declared in conformity with the relevant Machine Directive requirements.

Arcole, 22nd October 2003

Linz Electric Srl
Chairman
Silvano Pedrollo

(ES)

DECLARACION DE CONFORMIDAD

Linz Electric S.r.l, con la sede en San Bonifacio (VR- Italia) en Via E.Fermi n°16, declara bajo su propia responsabilidad que los alternadores síncronos trifásicos de la serie E1S y monofásicos de la serie E1C que ésta produce son conformes a los requisitos fundamentales previstos por las siguientes directivas:

- **73/23 CEE**
- **EMC 89/336 CEE**
  (Compatibilidad electromagnética)
- **98/037 CEE**
  (Directiva máquinas)

Dichos alternadores están construidos observando las normas **EN 60034-1** (Máquinas eléctricas rotativas), **EN 50081-1**, **EN 50082-1**.

Los alternadores que son objeto de la presente declaración no pueden ser puestos en servicio antes que las máquinas a las cuales los mismos serán acopiados hayan sido declaradas conformes a las disposiciones de la directiva máquinas.

Arcole, 22 Octubre 2003

Linz Electric Srl
Administrador único
Silvano Pedrollo

FR

DECLARATION DE CONFORMITE

La société Linz Electric Srl avec siège à San Bonifacio (VR) Via E. Fermi, 16 déclare que sous sa responsabilité que les alternateurs synchrones triphasés de la série **E1S** et monophasés de la série **E1C** par elle même produits sont conformes aux conditions essentielles de sécurité requises par les directives suivantes:

- **73/23 CEE** et **96/68 CEE**
  (Directive Basse Tension)
- **EMC 89/336 CEE**
  (Compatibilité Electromagnétique)
- **98/037 CEE**
  (Directive Machines)

Les alternateurs sont fabriqués en observant les normes **EN 60034-1** (Normes pour les machines électriques tournantes) , **EN 50081-1, EN 50082-1.**

Les alternateurs objet de présente déclaration ne peuvent pas être utilisés avant que les machines sur lesquelles il seront assemblés ne sont pas déclarées conformes aux dispositions de la Directive Machines relative.

Arcole, 22 Octobre 2003

Linz Electric Srl
Administrateur
Silvano Pedrollo

DE

KONFORMITÄTSERKLÄRUNG

Die Fa. Linz Electric Srl mit Sitz in San Bonifacio (VR), Straße Via E. Fermi 16, erklärt auf eigene Verantwortung, dass die von ihr produzierten Synchrondrehstromgeneratoren der Baureihe **E1S** und der Einphasenwechselstromgeneratoren der Baureihe **E1C** mit den wesentlichen Voraussetzungen an die Sicherheit in Übereinstimmung sind, die die folgenden Richtlinien vorsehen:

- **73/23 EWG**
  (Niederspannungsrichtlinie)
- **EMC 89/336 EWG**
  (Elektromagnetische Kompatibilität)
- **89/392 EWG**
  (Maschinenrichtlinie)

Die Konformität mit diesen Richtlinien wird dadurch nachgewiesen, dass bei den bezeichneten Produkten die Normen **EN 60034-1** (drehende elektrische Maschinen) , **EN 50081-1, EN 50082-1** eingehalten werden.

Die Drehstromgeneratoren, die Gegenstand dieser Erklärung sind, dürfen erst dann in Betrieb genommen werden, wenn für die Maschinen, in die sie montiert werden, die Erklärung über die Konformität mit den entsprechenden Bestimmungen der Maschinenrichtlinie vorliegt.

Arcole, 22. Oktober 2003

Linz Electric Srl
Alleingeschäftsführer
Silvano Pedrollo