

LAUFKATZENVORRICHTUNG UND DREHBAUGRUPPE

KAPITEL 12

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INHALTSVERZEICHNIS

TLS 65B 10T

1. LAUFKATZENVORRICHTUNG MODELL 6HP

1.1. AUF- UND ABBAU AUF DEM TEILSTÜCK 1 DES AUSLEGERS

Die gesamte Montage des Geräts erfolgt werksseitig. Informationen zum Austausch und zur Demontage von Auslegerstück 1 finden Sie in **Kapitel 8 MONTAGE DES 1. AUSLEGERSTÜCKS T1**.

1.2. TECHNISCHE SPEZIFIKATIONEN

<p>LAUFKATZENMOTOR:</p> <ul style="list-style-type: none"> • Hersteller: Besozzi • Modell: MCFA132 • Nennmotorleistung: 4.5 Kw • 1500 U/min. bei 50 Hz. • Nennspannung 400 V • Nennstrom 12.5 A • Schutzklasse IP55 	<p>UNTERSETZUNGSGETRIEBE DER LAUFKATZE:</p> <ul style="list-style-type: none"> • Hersteller: Besozzi • Modell: BEK 3S • Untersetzungsverhältnis 30 • Schmieröl Typ: SC 320
<p>LAUFKATZENTROMMEL:</p> <ul style="list-style-type: none"> • Teilkreisdurchmesser 350 mm • Spullänge der Trommel 554 mm. • 1 Lage. 	<p>LAUFKATZEN-SEIL:</p> <ul style="list-style-type: none"> • Durchmesser 7 mm • Typ 6x19x1 • Bruchlast 27KN • Langes Seil 140 m • Kurzes Seil 90 m

Dieses Gerät wird von einem Frequenzumrichter gesteuert, welcher über 3 Übertragungsgeschwindigkeiten im Hauptlastenbereich und zwei im sekundären Lastenbereich verfügt (siehe Kapitel 14 Begrenzung und Steuerung):

							
◀ ▶	m/min	0 / 11	0 / 37	0 / 75	0 / 11	0 / 37	0 / 75
	Kw	4,5	4,5	4,5	4,5	4,5	4,5

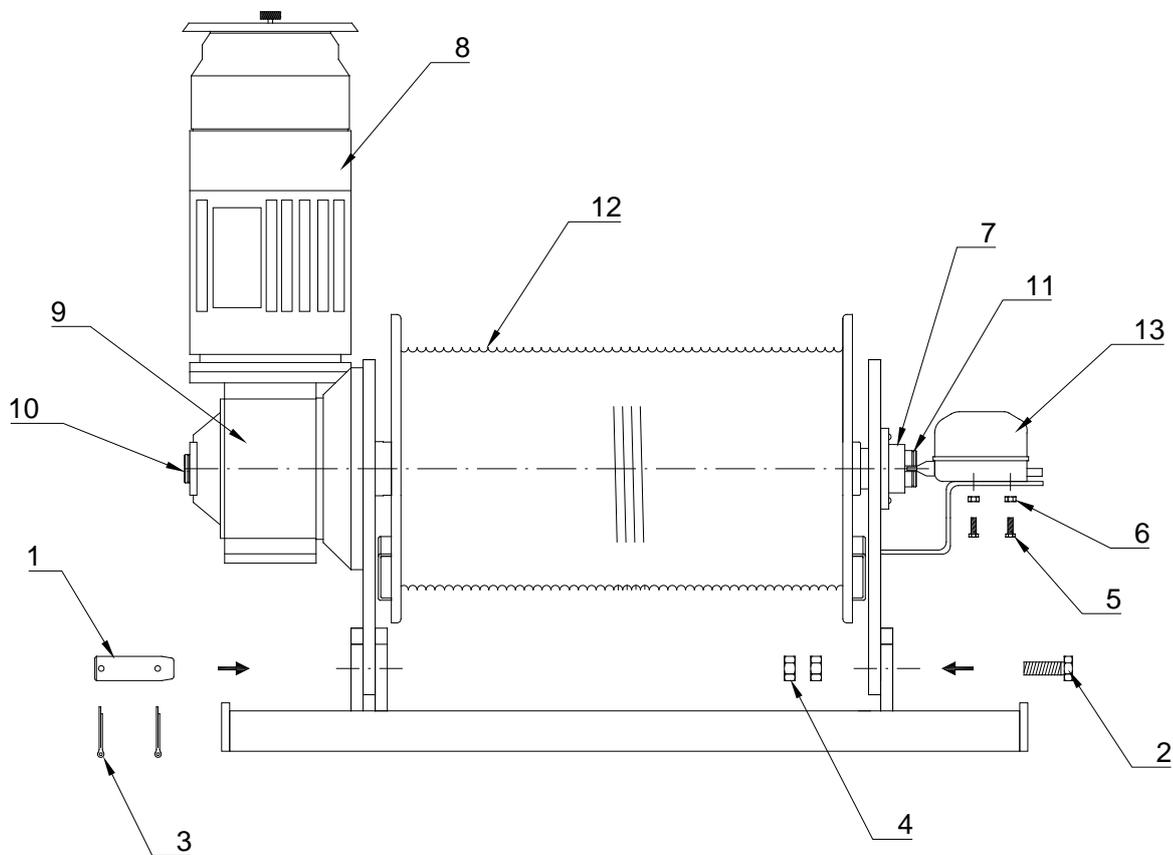
1.3. WARTUNG UND KONTROLLE DES LAUFKATZEN-SEILS

Es gelten dieselben Bedingungen wie in Kapitel 10 HEBEVORRICHTUNG **45HP10T**.



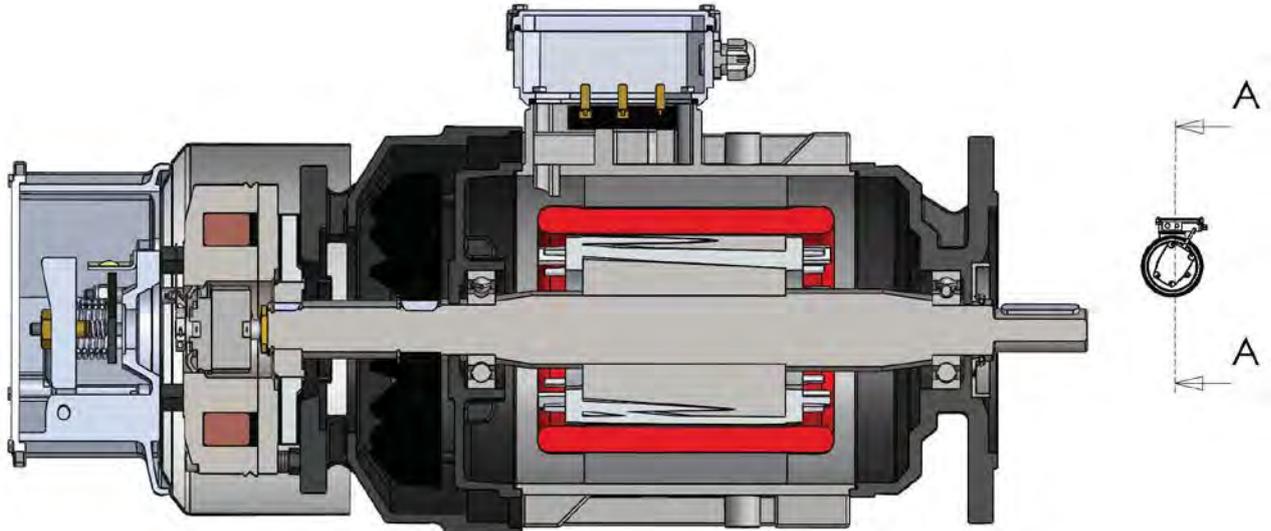
WICHTIG: Es müssen stets zwei Windungen des Seils in der Trommel verbleiben.

1.4. ERSATZTEILE FÜR DIE LAUFKATZENVORRICHTUNG

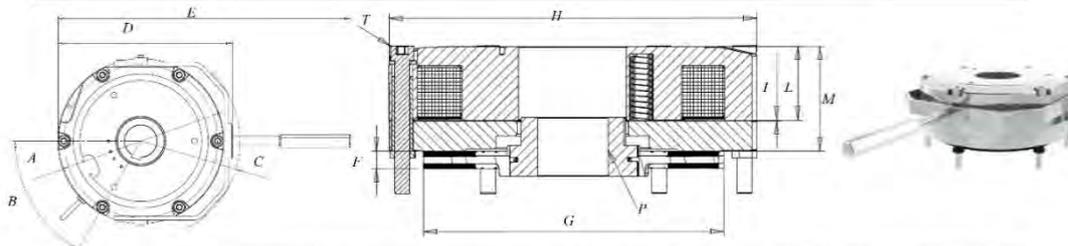


LAUFKATZENSYSTEM 6HP			
REF.	STÜCKZAHL	BEZEICHNUNG	ERSATZTEIL-KENNNUMMER
1	2	Bolzen Ø30x98	V 05 500 001
2	2	Schraube M16x60	--
3	4	Splint Ø6x60	--
4	4	Mutter M16	--
5	2	Schraube M6x15	--
6	4	Mutter M6	--
7	1	Lager mit Halterung	SLF E45
8	1	Laufkatzenmotor	--
9	1	Untersetzungsgetriebe der Laufkatze	Erb30 35C
10	1	Federring Ø35 E	
11	1	Federring Ø45 E	
12	1	Laufkatzentrommel Ø350	
13	1	Begrenzer der Laufkatze	GF4C - 1:100

1.5. TEILE DES LAUFKATZENMOTORS



 *GR Brake type characteristics*



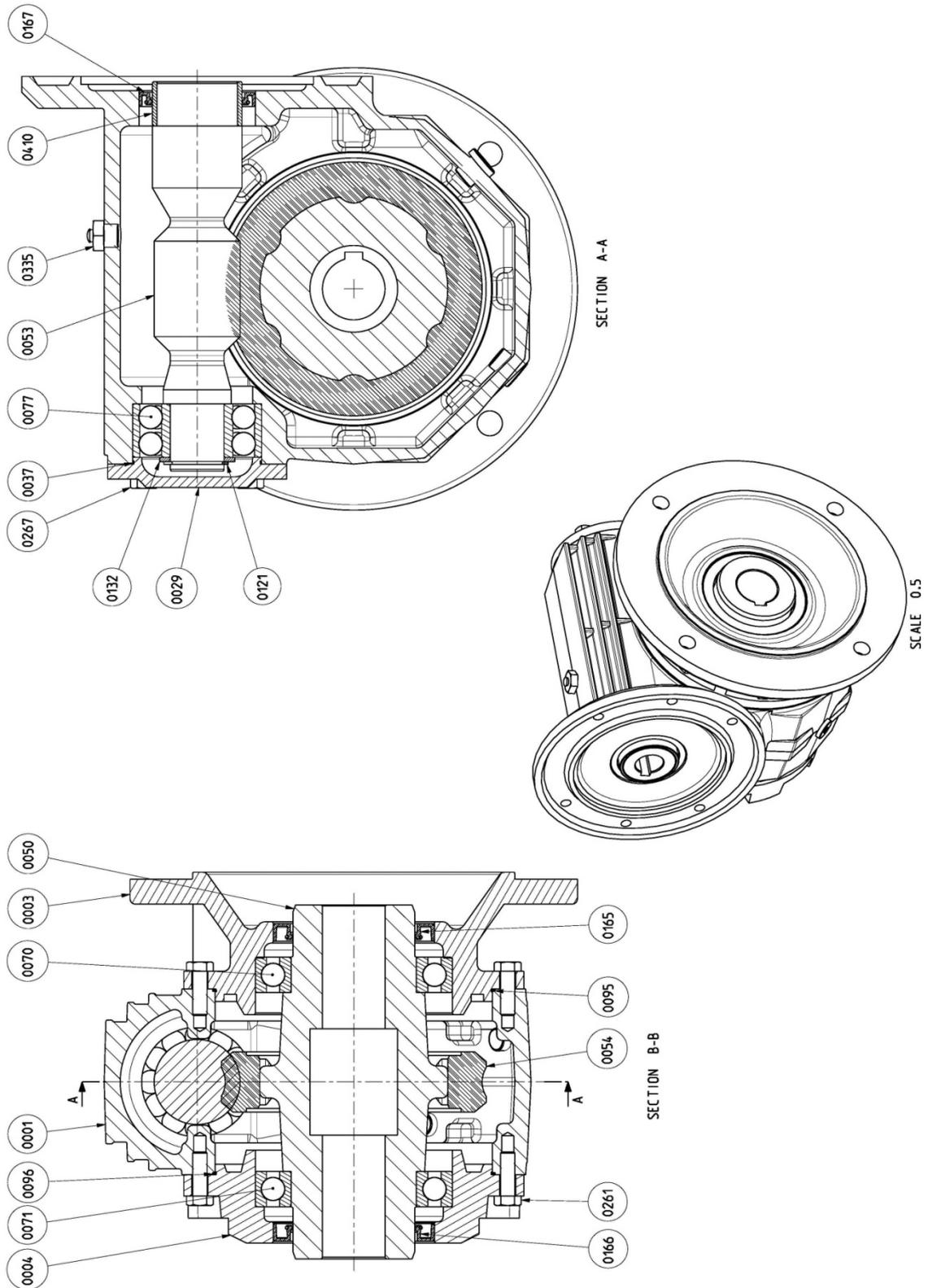
TYPE	POWER [W]	STATIC TORQUE [Nm]	FIXING SCREWS (T)		P (P) α=20° mod=3			O.L	B	ØC	D	E	F	ØG	ØH	I	L	M
			N°	Type	z teeth	Ømin	Ømax											
GR5	30	40	3	M6 X 80	20	22	34	132	120	-	-	-	12	107	147	0.3	38	48
GR6	45	55	3	M8 X 70	20	24	34	145	120	-	-	-	12	115	160	0.3	46	57
GR7	50	90	3	M8 X 85	20	24	34	170	120	-	-	-	14	149	187	0.3	48	62
GR8	95	150	6	M10 X 90	23	42	42	196	60	103	240	354	12	175	215	0.3	56.5	72.5
GR8-D	95	300	6	M10 X 120	28	42	42	196	60	-	-	-	12	175	215	0.45	56.5	94
GR9	135	280	6	M10 X 90	28	42	48	230	60	256	261	438	12	202	248	0.3	50	71
GR9-D	135	550	6	M10 X 120	28	48	48	230	60	-	-	-	12	202	248	0.45	50	98
GR9-H	150	370	6	M10 X 130	28	48	48	230	60	256	261	438	12	202	248	0.3	68	83.5
GR10	150	600	6	M10 X 20	28	48	48	278	60	-	-	-	11.7	248	304	0.3	70	89

*Dimensions in mm - Standard voltage 20/100/180 Vdc - CL "L"

Aggiornato al: d402yy

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1.6. ERSATZTEILE FÜR DAS UNTERSETZUNGSGETRIEBE DER LAUFKATZE



Untersetzungsgetriebe Mecabloc B30 Durchmesser 353 mm

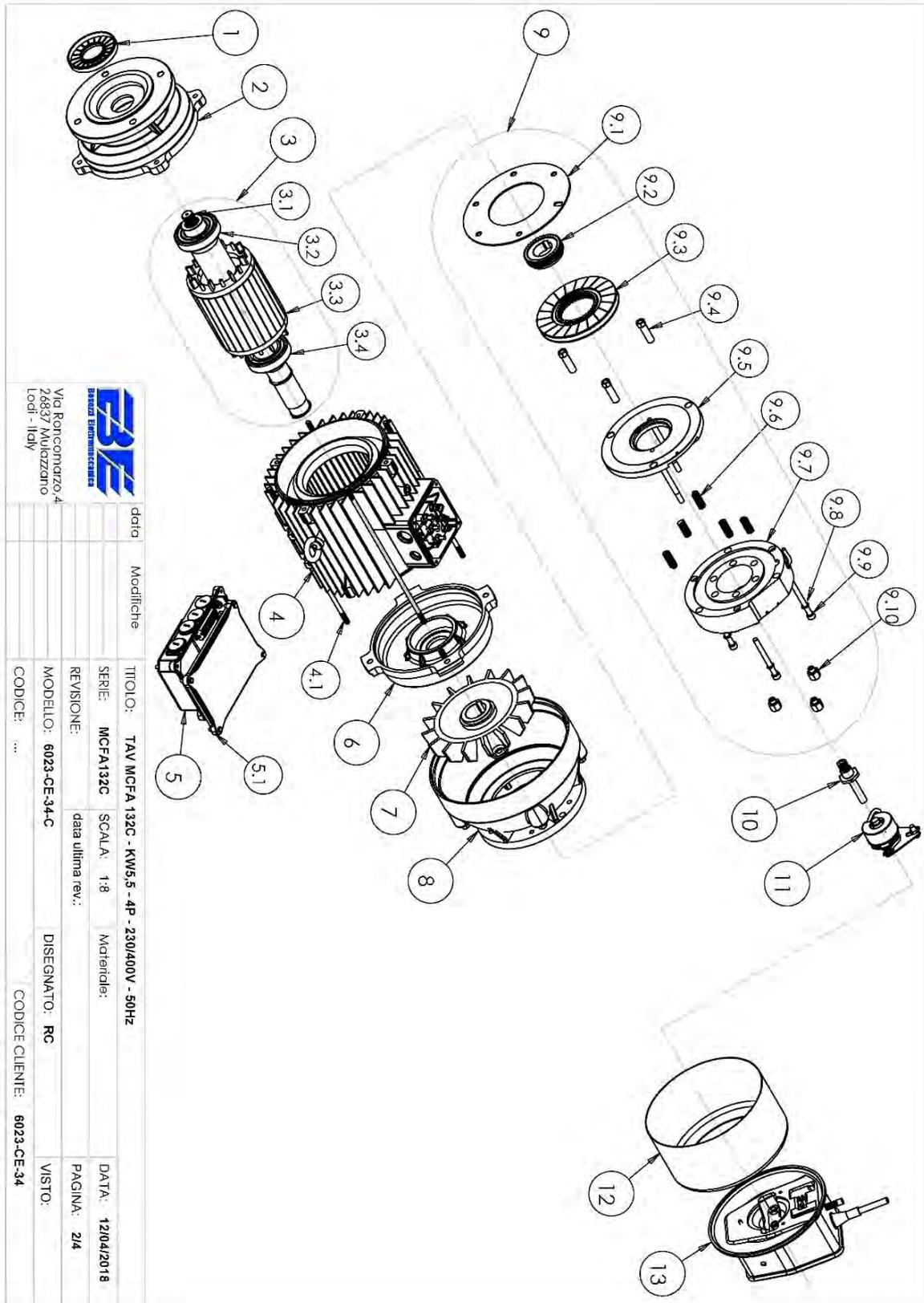
Ref.	LS-Kennnummer	Bezeichnung	Material
001	CAR087OF001	Carter S F165	FGL150
003	PAL215BF005	Motorflansch F215 BO 53C	FGL150
004	PAL110FF006	Runddeckel 44C	FGL150
029	PUS100DF018	Hinterer Deckel	FGL150
037	JOI069TB003	Ring 69 x 1,5	NITRIL
053	ENG040VF003	Schneckenschraube AL.24 R:42	XC42SV
054	ENG135RV006	Umlenkrolle 35 R:42	
070	RLT070TS000	Lager 6014 JN	STAHL
071	RLT070TS000	Lager 6014 JN	STAHL
077	RLT030CO335	Lager	STAHL
095	JOI148TB003	Ring NBR D148 x 2mm	
096	JOI148TB003	Ring NBR D148 x 2mm	
121	ARR030CE001	Federring Außendurchmesser 30 DIN 471	STAHL
132	RLT030RA020	Scheibenhalter	STAHL
165	JOI068BL0001	Dichtungsring A 68x90x10	NITRIL
166	JOI068BL0001	Dichtungsring A 68x90x10	NITRIL
167	JOI050BM002	Dichtungsring AS 50x65x8 NITRIL	NITRIL
261	VIS008HF705	Schraube M8x25 8/8 ZJ	STAHL
267	VIS008HF705	Schraube M8x25 8/8 ZJ	STAHL
290	VIS010HF705	Schraube M10x25 8/8 ZJ	STAHL
305	LEV013AN001	Hubring	STAHL
330	QUI013BM002	Steckdose 6 1/4 GAS HT 10M	STAHL
335	QUI013BM201	Kühlkörper-Steckdose 1/4 "	ALUMINIUM
410	RLT045BI003	Innerer Ausgleichsring 45x50x25 EGS	STAHL

2. TECHNISCHE MERKMALE DES INVERTERS

<p>DREHMOTOR:</p> <ul style="list-style-type: none"> • Hersteller: Besozzi • Modell: MCFA132 • Nennmotorleistung: 5.5 Kw • 1450 U/min. bei 50 Hz. • Nennspannung 400 V • Nennstrom 12.5 A • Schutzklasse IP23 	<p>DREHWEG-UNTERSETZUNGSGETRIEBE:</p> <ul style="list-style-type: none"> • Hersteller: Brevini • Modell: RPR 3065T • Untersetzung 160,5
	<p>DREHKRANZ:</p> <ul style="list-style-type: none"> • Verzahnung innen. • Modul 12 • Anz. Zähne 120.

Die Drehgeschwindigkeit ist in der folgenden Tabelle dargestellt.

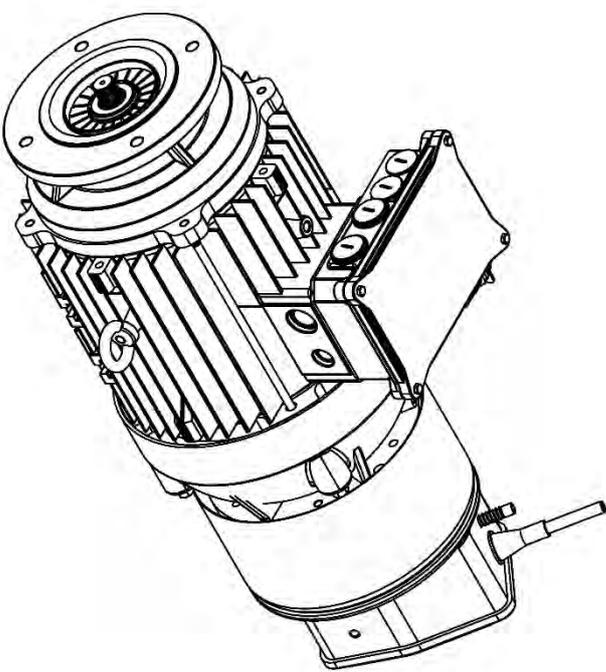
 Inverter	r.p.m.	0,3	0,6	0,9
	Kw	2 x 5,5		

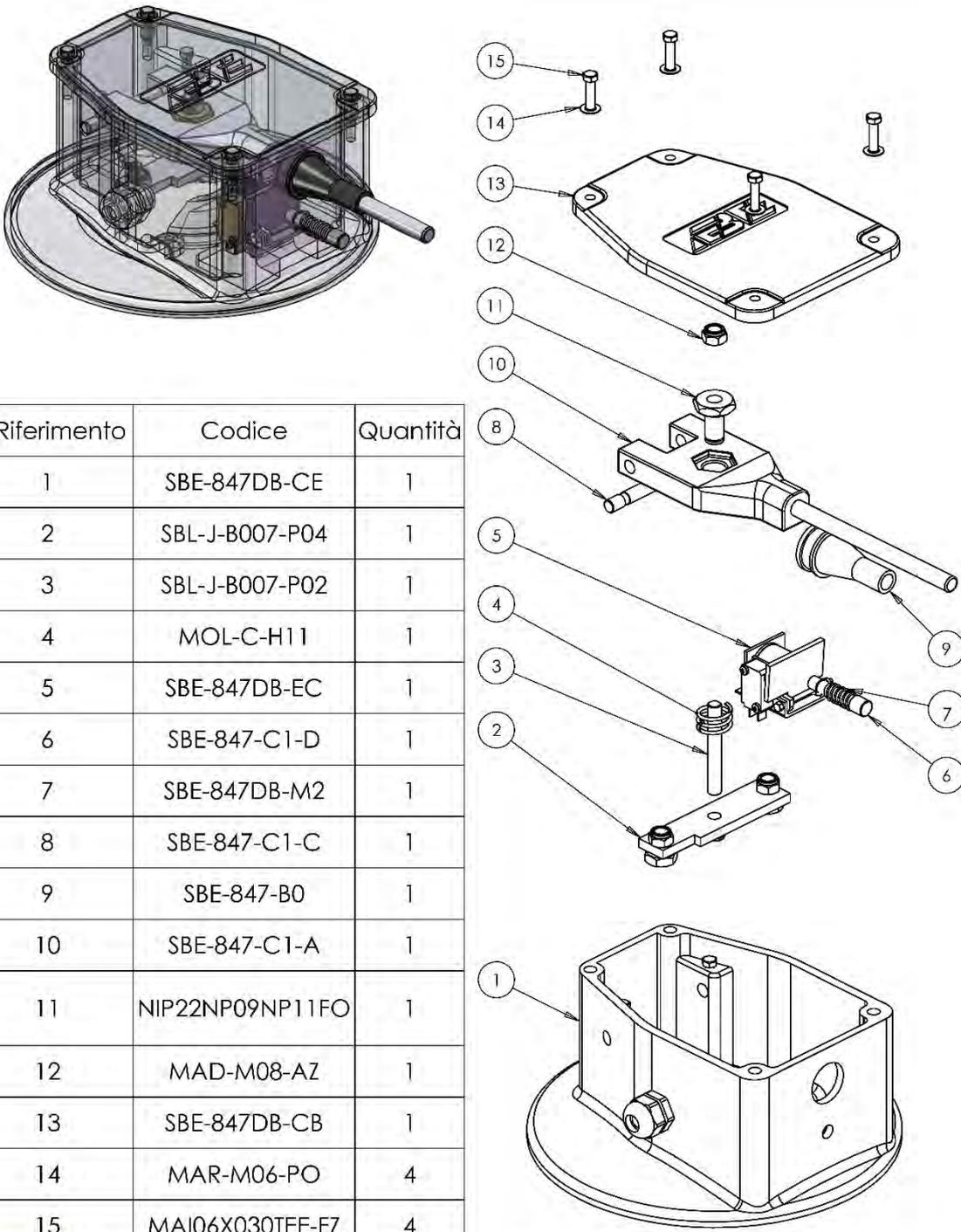


		Via Roncomarzo, 4 26837 Mulazzano Lodi - Italy	
data:	Modifiche:	TITOLO:	TAV MCEA 132C - KW5,5 - 4P - 230/400V - 50HZ
		SERIE:	MCEA132C
		SCALA:	1:8
		REVISIONE:	data ultima rev.:
		MODELLO:	6023-CE-34-C
		DISEGNATO:	RC
		CODICE:	...
		CODICE CLIENTE:	6023-CE-34
		DATA:	12/04/2018
		PAGINA:	2/4
		VISTO:	

NºRiferimento	Descrizione	Codice	Quantità
1	Corteco	COR-4090H12-A	1
2	Front flange	FLA60L-200+00NC	1
3	Rotor	RT132-D391CLZL	1
3.1	Shaft	AM-60L-391CLZL	1
3.2	Bearing	CUS-6208	1
3.3	Squirrel-cage rotor	PR125050130D28A	1
3.4	Bearing	CUS-6208	1
4	Stator	MF-1222-C	1
4.1	Motor's screw	TIM-M08-L330	4
5	Terminal box	SCB132-V1AB-SEA	1
5.1	Cover terminal box	CCB-M60L	1
6	Rear cover	MCA60L	1
7	Fan	VEN-MEC132-AR	1
8	Self breaking cover	CLM60L-F007-C1	1
9	Brake	GF-BJ07P1T020JU	1
9.1	Inox plate	DSC-INOX-804-A	1
9.2	Pinion	PIG-Z34H18D35U	1
9.3	Brake disc	DSC-B007-PZ34A	1
9.4	Air-gap setting	REG-B-D12H39	3
9.5	Armature plate	ANM-B007-J	1
9.6	Springs	MOL-B-J00	5
9.7	Coil	ELM-BJ07-020	1
9.8	Schnorr galvanizaded washer	MAR-M08-ZZ	3
9.9	Hex allen bolt	TIR-B-M08H085	3
9.10	Nipples	NIP17MA10MAA05FF	3
10	Reaction arm	SUP-E32M16H940A	1
11	Encoder	ENC-K5020TTL-L1	1
12	Free jib slewing	SBL-84ZDB-E	1
13	Carter	CT-007H122D220A	1

		data	Modifiche
Via Roncomarzo, 4 26837 Mulazzano Lodi - Italy			
TITOLO:	TAV MCF A 132C - KW5,5 - 4P - 230/400V - 50HZ	DATA:	12/04/2018
SERIE:	MCF A132C	SCALA:	1/5
REVISIONE:		data ultima rev.:	
MODELLO:	6023-CE-34-C	DISEGNATO:	RC
CODICE:	...	VISTO:	
CODICE CLIENTE:		6023-CE-34	

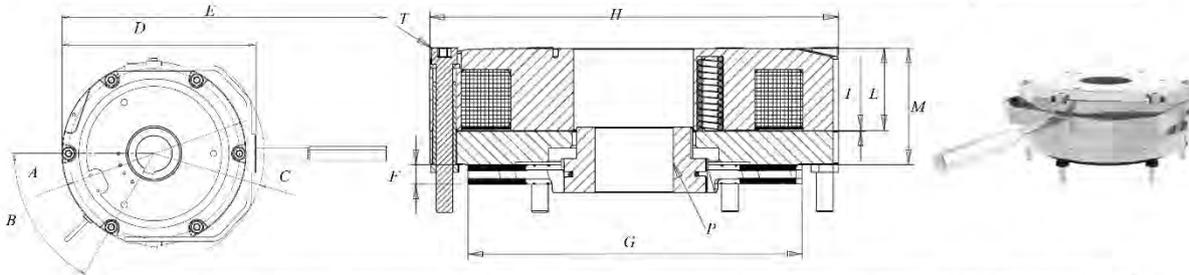




N°Riferimento	Codice	Quantità
1	SBE-847DB-CE	1
2	SBL-J-B007-P04	1
3	SBL-J-B007-P02	1
4	MOL-C-H11	1
5	SBE-847DB-EC	1
6	SBE-847-C1-D	1
7	SBE-847DB-M2	1
8	SBE-847-C1-C	1
9	SBE-847-B0	1
10	SBE-847-C1-A	1
11	NIP22NP09NP11FO	1
12	MAD-M08-AZ	1
13	SBE-847DB-CB	1
14	MAR-M06-PO	4
15	MAI06X030TEE-FZ	4

 Via Roncomarzo,4 26837 Mulazzano Lodi - Italy	data	Modifiche	TITOLO: TAV SBL-847DB-E			
			DISEGNO:	SCALA 1:3	materiale:	DATA 22/09/2016
			REVISIONE:	data ultima rev.		PAGINA: 4/4
			MODELLO	DISEGNATO	RC	VISTO
			CODICE:	SBL-847DB-E		

GR Brake type characteristics



TYPE	POWER [W]	STATIC TORQUE [Nm]	FIXING SCREWS (F)		P (P) Q= 20° mod= 3			ØA	B	ØC	D	E	F	ØG	ØH	I	L	M
			N°	Type	z teeth	Ømin	Ømax											
GR5	30	40	3	M6 X 80	20	22	34	132	120	-	-	-	12	107	147	0.3	38	48
GR6	45	55	3	M8 X 70	20	24	34	145	120	-	-	-	12	115	160	0.3	46	57
GR7	50	90	3	M8 X 85	20	24	34	170	120	-	-	-	14	149	187	0.3	48	62
GR8	95	150	6	M10 X 90	23	42		196	60	103	240	354	12	175	215	0.3	56.5	72.5
GR8-D	95	300	6	M10 X 120	28	42		196	60	-	-	-	12	175	215	0.45	56.5	94
GR9	135	280	6	M10 X 90	28	42	48	230	60	256	261	438	12	202	248	0.3	50	71
GR9-D	135	550	6	M10 X 120	28	48		230	60	-	-	-	12	202	248	0.45	50	98
GR9-H	150	370	6	M10 X 130	28	48		230	60	256	261	438	12	202	248	0.3	68	83.5
GR10	150	600	6	M10 X 20	28	48		278	60	-	-	-	11.7	248	304	0.3	70	89

*Dimensions in mm - Standard voltage 20/100/180 Vdc - CL "F"

The slewing brake is model GR7, with a regulated torque of 34 Nm and a gap "I" of 0.7mm.

Assembly brake GR model:

GENERAL CHARACTERISTICS

GR series brakes made by Besozzi Electromeccanica are spring brakes. They are supplied by DC voltage.

Distinctive features of these products are:

- Strong structure
- Noiseless during operations
- Economy due to simple assembly process of the brake
- Excellent heat dissipation also helped by the fan motor and / or by motor cover
- The coil is fully cemented with epoxy resin and mechanical parts are protected by galvanic treatment
- Insulation is Class F (*the design of the brake allows the use in continuous service*)
- The possibility to assembly a manual release system and other accessories to each brake



Electromagnets and mobile plates are made directly from rough steel bars C10 by CNC machines



HOW THEY WORK

The excitation coil is put inside the electromagnet [C] and then it is properly cemented with epoxy to ensure electrical isolation and mechanical strength. Torque springs [E] are inserted inside appropriate slots on the electromagnet [C]. Without power, the current does not circulate inside the excitation coil. In this condition, as generated FMM is zero, the torque springs [E] push the mobile plate [F] against the brake disc [H] which is connected to the motor's shaft by a pinion [I]. The shaft is then braked and the brake is called **closed**. Supplying the excitation coil, it is generated a magnetic field whose effect is to produce the FMM necessary to overcome the springs' elastic force and attract the mobile plate [F] towards the electromagnet [C]. In this condition, the springs are loaded, motor's shaft is free to rotate and the brake is called **open**.



Item	Description
A	Hallen bolt fixing screws
B	Washers
C	Electromagnet / coil
D	Hand release
E	Coil springs
F	Armature plate
G	Air gap setting screw
H	Brake disc
I	Pinion

COMPONENTS' CHARACTERISTICS



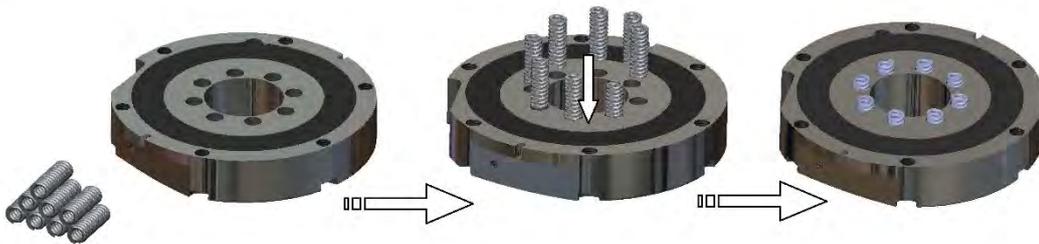
1. The electromagnet and the mobile plate are made by UNI C10 steel and subjected to a galvanizing process.
2. The adjusting nuts are subjected to surface induction hardening process to prevent them from any possible damage during maintenance operations and to protect them by the external environment
3. Brake disk ring is made by UNI C50 steel or, alternatively, by Aluminium. Friction linings are glued on it.
4. Pinion is made by UNI C50 steel and includes O-rings to ensure correct positioning of the disc brake without sliding on mobile plate or on the shield of the motor.
5. Friction linings do not contain any ferrous materials in order to not create any rust. Furthermore, the mobile plate has a galvanizing treatment therefore, even after a long period of inactivity, the disc does not stick to the shield of the motor
6. On request, each disc can be grinded, dynamically balanced and runned to ensure top performances.



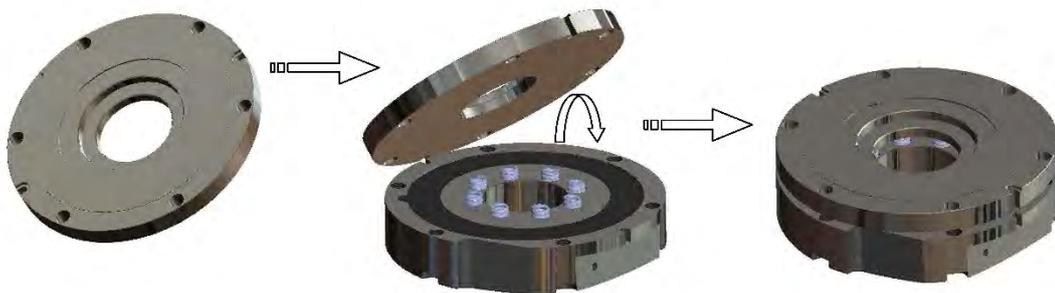
ASSEMBLY PROCESS

The brake unit is supplied already pre-assembled. However, if for any reason customer wants to access to the inner components, the procedure to reassemble the brake unit is as follow:

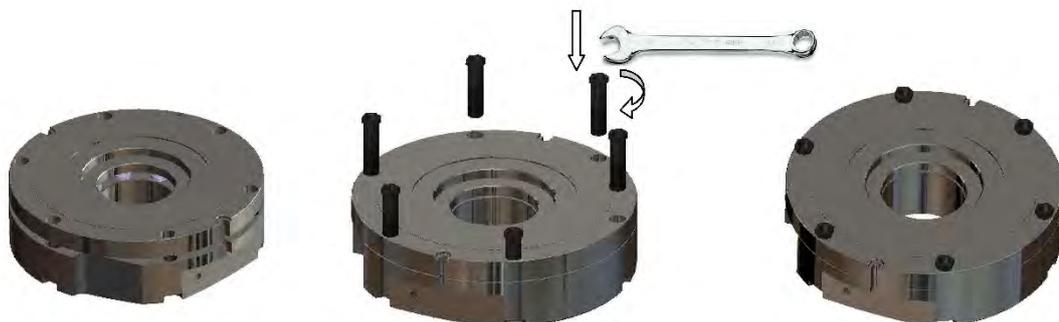
1. To put the pressure springs inside the holes on the magnet



2. To place the mobile plate on the springs so that all its holes are aligned with the corresponding on the electromagnet



3. To fix the mobile plate on the electromagnet use the adjusting nuts



4. To assembly the hand release's components placing and securing them on the brake as shown. To regulate the hand release, refer to operating and maintenance instructions supplied with the product.



5. To place the disc brake on the shield of the motor. Then fix the brake unit tightening the screws.



6. Adjust the air gap (the red coloured area) to the value shown in the specification working on the fixing screws and the adjusting nuts as follows:

- Select on the gauge the item corresponding to the desired air gap and insert it between the electromagnet and the mobile plate.
- Tighten the fixing screws till the gauge's element is locked
- Tighten the adjust nuts against the motor's shield up to allow the extraction of the gauge's item
- Perform this procedure for all the screws/nuts
- Check the value of air gap and, if necessary, repeat the above described procedure

