BULL80-100-130-160 Planetary Mixers

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BULL planetary mixers

BULL range of planetary mixers is designed for dough kneading, eggbeating and creams for the food industry but in the chemical and cosmetic industries, as well.

The machines are featured with an inverter and a speed variator, which allow for the selection of the right speed in any situation, smoothly and without sudden changes. Low speeds are suitable for doughs, medium and higher speeds are for eggbeatings and creams.

All models are supplied with three interchangeable tools(spiral, whip and paddle) and s/steel bowl. Optional scrapers are made of s/steel and anti-adherent materials.

All parts which are brought into contact with food are either in s/steel or in aluminum.

All models comply with European safety standards. Several micro switches guarantee that the mixer stop or cannot start in case of malfunction or wrong operations

WARNING



Before using the machine, read the instructions of this manual in order to ensure your safety and for the knowledge in the use of the machine. For any information about the instructions manual please contact the MANUFACTURER quoting all data on the technical plate, i.e. model, serial number, construction year, etc...

Keep this instruction manual in a safe place, for reference.

The manufacturer reserves the right to modify and/or improve the machine without any obligation to update earlier versions of machines and manuals.

Do not operate under the effect of alcohol, medicines or drugs which could alter your physical conditions.

Keep hair and other parts of the body far from rotating parts such as tools and gears.

Do not remove warning stickers, as well as the ones containing safety data, keep them clean

GRAPHIC SYMBOLS USED IN THE MANUAL



Warning regarding the execution of the operations described or possible danger



Operations to be carried out only by authorized operators



Operations which can be carried out by regular operators since they do not require specific skills

PLATES & WARNING STICKERS











The plate includes important information which have to be mentioned when applying for warranty and / or spare parts

WARRANTY & LIABILITY

- The seller guarantees that at the moment of dispatch the equipment is in perfect functional and aesthetic condition.
- The seller guarantees the equipment supplied for a time of 12 months for normal conditions of use and according to the product's technical specifications.
- During the warranty period, the seller undertakes at his discretion, to repair or replace parts found to be faulty but not to collect the equipment.
- It is mandatory for all parts deemed faulty to be returned to the seller for replacing. Transport costs for returning the parts deemed faulty and for shipping parts covered by the warranty, shall be borne by the buyer.
- Parts subject to normal wear, damage to the paintwork, damage occurred during transport, damage caused by an incorrect assembly and/or installation, tampering by the buyer or third parties and goods without the seller's mark are not covered by the warranty.
- Except for proven hidden flaws, none of the electrical and electronic parts are covered by the warranty.
- Costs borne by the buyer for replacing faulty parts will not be refunded, likewise any indirect damages caused by failures or malfunctions of the equipment.
- The buyer must immediately report a wrong delivery or any defects found in the goods and send his reserves by fax, e-mail or registered letter, together with suitable documentation proving the reason for the complaint. When **7 days** have elapsed from receipt of the goods, the seller shall consider the supply approved by the buyer.
- A delay in payment or non-payment, even only of a part of what is due, suspends all rights to the warranty up until payment is settled, it being understood that the original expiry date of the warranty still remains.

SAFETY

- It is forbidden to tamper with the safety guards and other safety devices of the machine
- In case any of the safety features of the machine do not work or are damaged, they must be immediately repaired
- Do not remove for any reason the safety grid or any other safety device
- Before cleaning or servicing the equipment switch OFF the main switch and unplug the plug from the socket
- Inform and advise all workers of the risks in the work place.

The manufacturer cannot be held responsible in the following cases:

- improper installation of the machine
- electrical supply problems
- improper and/or incorrect use of the equipment
- non-compliant use according to the regulations in force in the country where the machine is installed
- lack of daily maintenance
- non authorised modifications
- use of non original spare parts

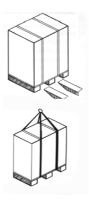
HANDLING



The machine must be lifted only by authorized operators

The machine can be delivered packed either in a wooden crate or in a cardboard with a pallet and covered with a polyethylene film. When the machine is packed in a crate, it can be lifted by means of a fork lift or transpallet or with a crane by inserting ropes or bands under the crate. In this case the tension max. angle of the ropes, which is 45°, has to be respected. Once unpacked, the machine can be lifted with a crane





TECHNICAL SPECIFICATIONS

	BULL80	BULL100	BULL130	BULL160
Vasca – Bowl	80lt.	100lt.	130lt.	160lt.
Approx. min/max r.p.m shaft	20	20	20	20
Approx. min/max r.p.m tool	80	80	80	80
Kw	4,0	4,0	5,5	5,5
Control panel protection	IP54	IP54	IP54	IP54
Touch screen protection	IP65	IP65	IP65	IP65
Electric board protection	IP40	IP40	IP40	IP40
Average noise level dB	Less than 78	Less than	Less than 78	78 Less than 78
Weight kg	570	600	770	810
Crate dimensions	1100x1300xh.2050	1100x1300xh.2050	1200x1550xh.2300	1200x1550xh.2300

USE OF TOOLS

Product	Low speed	Medium speed 1	Medium speed 2	High speed	Tool
Bread	Х				spiral
Pizza dough	Х				spiral
Croissant dough	Х	х			spiral
Brioche dough	Х	х			spiral
Sugar dough	Х	х			spiral-beater
Cream puff dough					spiral
Meat	Х	Х			spiral-beater

Eggs	Х	Х	Х	Х	whip
Biscuits	X	Х	X	Х	whip
Meringue	Х	Х	X	Х	whip
Whipped	Х	Х	Х	Х	whip
cream					
Mashed	X	Х			beater-whip
potatoes					

STARTING AND TESTING THE MIXER



The electric connections have to be carried out by authorized operators

- The electric line must have the same voltage indicated on the plate of the equipment. The mixer is featured with a capacity selector proportioned to the machine installed power with a four contact three phases plug (three phases + earth) or single phase

The connections must be carried out according to the regulations in force in the country

- With the bowl in its lower position insert the tool in the shaft, turn it clockwise and position the safety ring in the final position to fix it
- Turn the main switch ON(right side of the body)
- Lift the bowl with button (4)
- Make sure the bowl is in the proper position(if not, a microswitch will not allow the machine to start
- Make sure the bowl grid is in the proper position by turning it leftwards(hear the micro click)
- Check if the bowl is empty
- Start the mixer by pressing the start button (1)
- Adjust speed with the speed variator knob(3)

After starting the machine:

- Test the emergency button (2) by pressing it while the machine is working. To start the machine again, turn the safety button clockwise and then press the start button(1)
- Test if the grid micro works by moving the grid(the machine should stop)
- Test if the machine stops by lowering the bowl
- Test the timer(5). Select the manual position to make the mixer work continuously. Use the "0" position for impulse rotation(to stop the tool in the front position), use the standard timer mode to make the mixer work for a selected time
- Verify that the tool turns in counter clockwise, otherwise turns the phases of the plug



CLEANING

Never use aggressive detergents or water jets to clean the machine, a wet soft sponge and a mild spray detergent are the best tools for the daily cleaning. If necessary, use air to remove flours or powders.

ALWAYS OPERATE WHEN THE MACHINE IS STILL



During servicing operations the equipment has not to be connected to the electric supply mains. The replacement of parts and the service to the electric system have to be carried out by skilled technicians

STANDARD MAINTENANCE

- Every three months lubricate the mechanic parts of the bowl lifting system. Depending on working and ambient conditions, this operation might be necessary more frequently
- From time to time check the belt tension. In case, adjust it by means of the screw on the motor plate(ref. 20 on spare part list)

TROUBLE SHOOTING

Trouble	Possible cause	Solution
The mixer does not start	The grid is not in the proper	Turn the grid till you hear the
	position	"click" of the micro
	The bowl is not in the proper	Check if the bowl reached its
	position	final position
	The bowl micro is not properly	Check if bowl back lever is
	pressed	pressing the rubber shaft and
		the micro
	The main switch is OFF	Turn it ON
The tool makes noise or hit	The tool might not be in its	Verify if the tools are properly
the bowl	final position with the fastener completely secured	fastened
	completely secured	
The speed of the tool is not	The dough is too strong or too	Reduce the quantity in excess
regular, the mixer stops	much	and quantity in energy
	Transmission belts are loose	Tighten them
The mixer stops or does not	The motor is overheated	Switch the mixer OFF and wait
start		for 10-15 min.
The mixer is noisy	The satellite gear needs	Remove the bell and grease
	lubrication	the gear

BULL80-100-130-160

PARTI DI RICAMBIO - SPARE PARTS

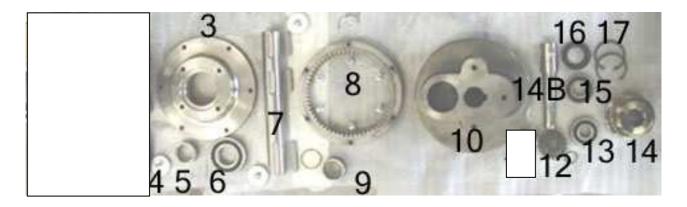




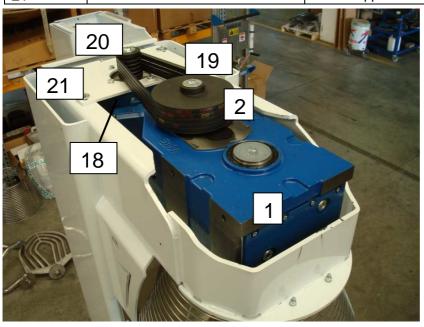
Ref.			Code	
1	Interuttore generale	Main switch		
2	Carter testa	Top cover		
3	Tappo superiore gamba	Leg cap		
4	Piede regolabile	Adjustable leg		
5	Tappo inferiore gamba	Plastic leg foot		
6	Variatore velocità(pomolo	Speed variator		
	escluso)	(knob excluded)		
7	Switch alzata vasca	Complete bowl		
	(completo)	control(up-down)		
8	Timer	Timer		
9	Pulsante di start	Start button		
10	Pulsante emergenza	Emergency button		
11	Griglia protezione	Protection grid		
12	Copri campana in plastica	Bell cover		
13	Micro sicurezza griglia	Grid safety micro		
14	Kit supporto griglia	Grid supports kit		



GRUPPO TRASMISSIONE – DRIVING GROUP

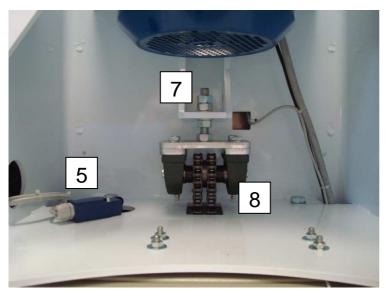


Ref.			Code	
1	Gruppo riduttore	Reducer		
2	Puleggia	Pulley		
3	Flangia	Flange		
4	Viteria	Screws		
5	Distanziale	Spacer		
6	Cuscinetto	Bearing		
7	Albero riduttore con chiavette	Shaft with keys		
8	Corona dentate	Crown		
9	Distanziale	Spacer		
10	Campana	Bell		
11	0	0		
12	Pignone+ seeger albero	Pinion & seeger x shaft		
13	Cuscinetto	Bearing		
14	Mandrino+anello aggancio utensili	Spindle + tool ring		
14B	Albero mandrino	Spinale shaft		
15	Cuscinetto	Bearing		
16	Anello di tenuta	Ring		
17	Seeger	Seeger		
18	Motore	Motor		
19	Cinghie	Transmission belts		
20	Puleggia motore	Motor pulley		
21	Piastra motore	Motor support		

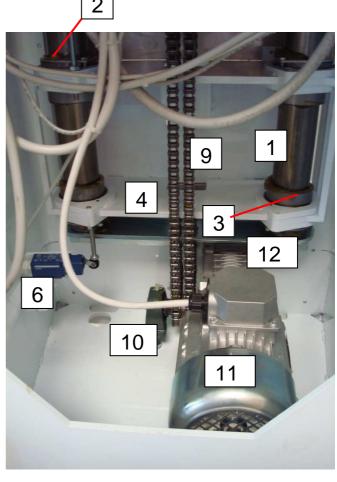


GRUPPO SOLLEVAMENTO VASCA AUTOMATICO – AUTOMATIC BOWL LIFT

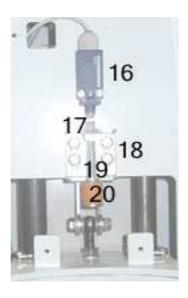
Ref.			Code	
1	Colonne sollevamento vasca	Bowl lifting bars		
2	Bloccaggio bussole	Sleeve looking		
3	Bussole Fe sinterizzato	Sinterized sleeve		
4	Piastra attacco colonne	Column support		
5	Micro fine corsa superiore vasca	Bowl upstroke micro		
6	Micro fine corsa inferiore vasca	Bowl downstroke micro		
7	Tendicatena	Chain tightener		
8	Supporti UCF, cuscinetti, albero pignone,pignone catene	UCF supports,bearings, shaft,chain pinion		
9	Catene pre-stirate			
10	Supporto UCF,cuscinetto,albero pignone, pignone catene	UCF supports,bearing, shaft,chain pinion		
11	Motore salita-discesa vasca	Bowl lifting motor		
12	Riduttore motore salita-discesa	Reducer for bowl lifting		
13	Inverter	Inverter		



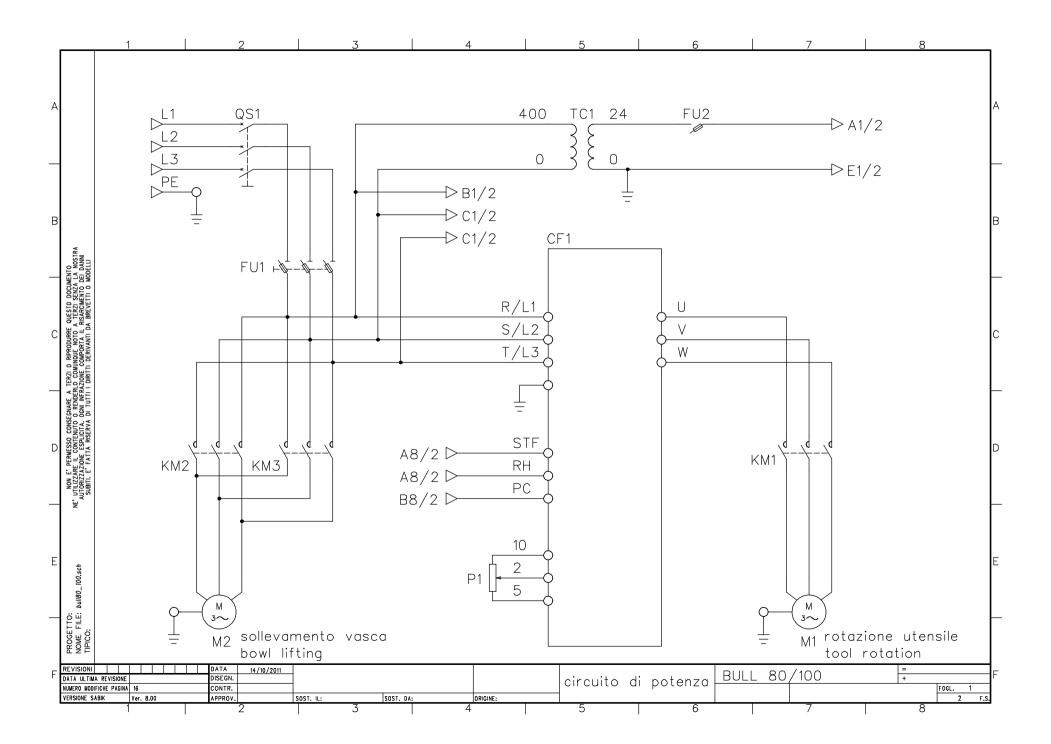


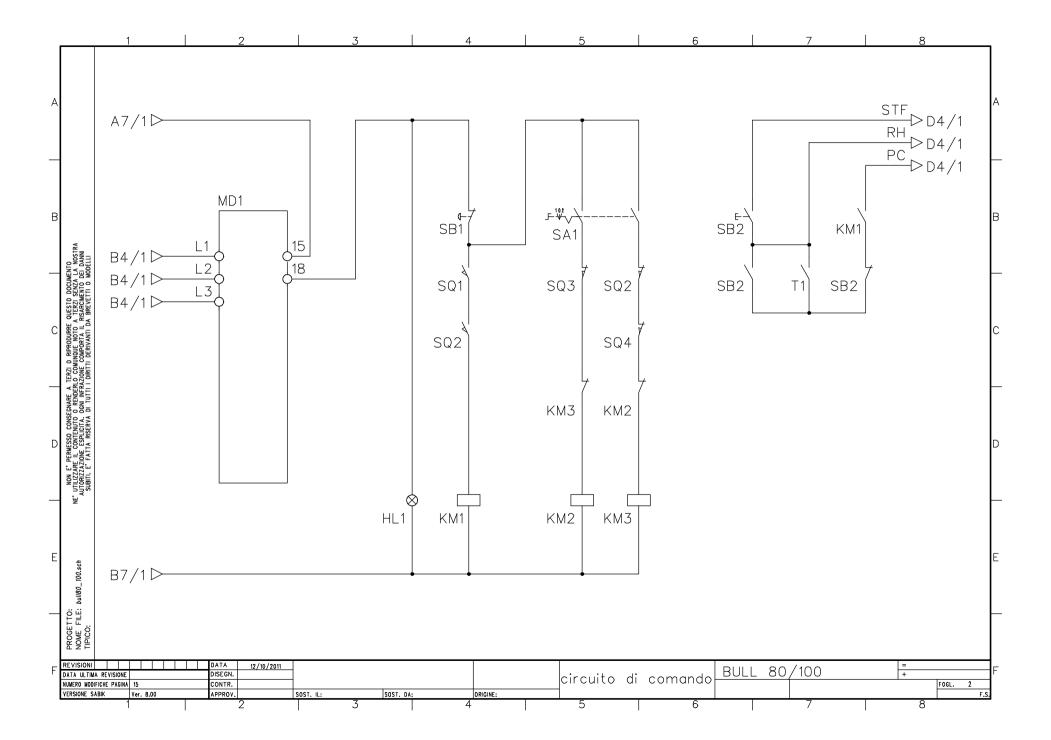


GRUPPO FRONTALE BLOCCAGGIO VASCA – FRONT BOWL LOCKING SYSTEM



Ref.			Code
16	Microswitch presenza vasca	Bowl micro	
17	Regolazione bloccaggio vasca	Bowl adjustment nuts	
18	Piastra supporto vite bloccaggio vasca	Plate support	
19	Albero bloccaggio vasca	Bowl locking shaft	
20	Tampone bloccaggio vasca	Rubber shaft	





MISCELATORE PLANETARIO BULL 80/100:distinta materiali

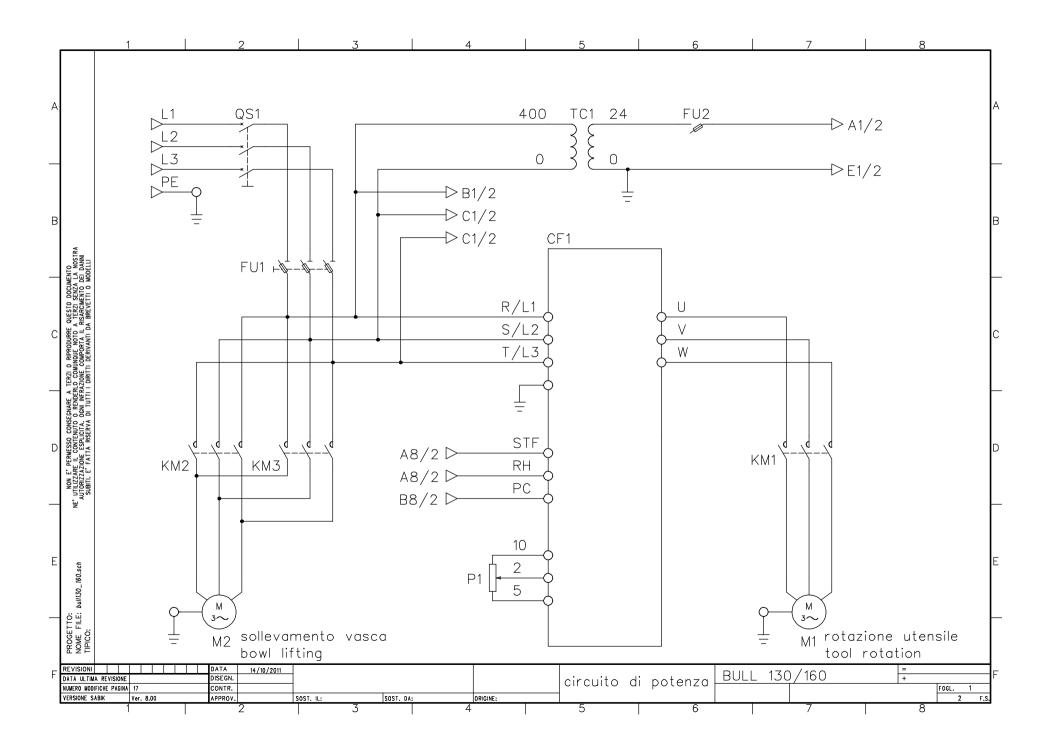
PLANETARY MIXER BULL 80/100:bill of materials

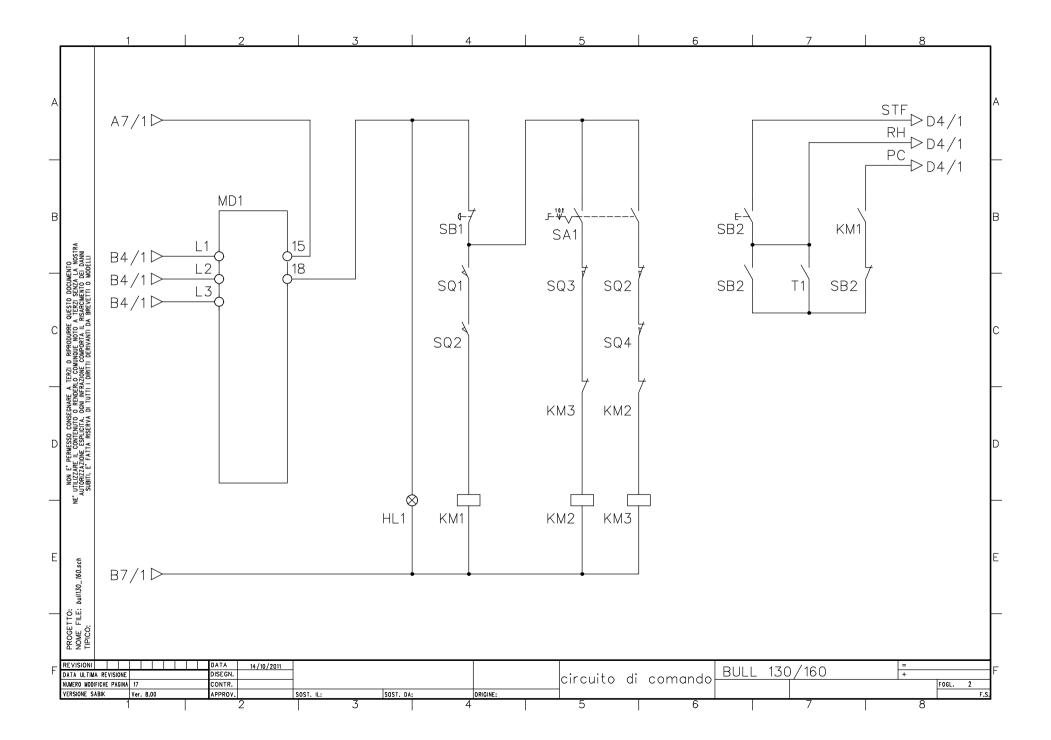
Schemi elettrici:BULL 80_100_1,BULL 80_100_2

Electric diagrams:BULL 80_100_1,BULL 80_100_2

Data emissione:12/10/2011
Date of issue:October 12 2011

	Date of issue:October 12 2011				
	EF DESCRIZIONE/SPECIFICATION	TIPO/PART NUMBER			
CF1	Inverter/Inverter	MITSUBISHI FR-D740-080-EC			
FU1	Portafusibile/Fuseholder	ABB E93/32			
<u>[</u>	Fusibile/Fuse	ITALWEBER 1422010			
	Fusibile/Fuse	ITALWEBER 1422010			
 	Fusibile/Fuse	ITALWEBER 1422010			
FU2	Portafusibile/Fuseholder	ABB E91/32			
	Fusibile/Fuse	ITALWEBER 1421001			
KM1	Contattore/Contactor	ABB B6-30-10			
KM2	Contattore/Contactor	ABB B6-30-01			
KM3	Contattore/Contactor	ABB B6-30-01			
HL1	Led/Led	ELFIN 010BA9SLB24			
MD1	Rilevatore sequenza fase/Phase Sequence Supervisor				
P1	Potenziometro/Potentiometer	PT 1K1G			
QS1	Interruttore/Main Switch	AB 194E-E16-1753			
	Finitura/Actuator	AB 194L-HE6N-175			
SB1	Pulsante/Pushbutton	ELFIN 020PTAARK			
	Contatto/Contact	ELFIN 020E01			
SB2	Pulsante/Pushbutton	ABB EO5499			
	Flangia/Flange	ABB 5697			
	Portalampada/Lampholder	ABB E05820			
	Contatto/Contact				
		ABB 5713			
	Contatto/Contact	ABB E05705			
0.44	Contatto/Contact	ABB EO5705			
SA1	Selettore/Selector switch	ELFIN 020STAMONKC			
	Flangia/Flange	ELFIN 020G			
	Contatto/Contact	ELFIN 020E10			
	Contatto/Contact	ELFIN 020E10			
SQ1	Microinterruttore/Microswitch	PIZZATO FF4515-2DN			
SQ2	Microinterruttore/Microswitch	COMEPI AP3T13Z11			
SQ3	Microinterruttore/Microswitch	TELEMECANIQUE XCKN2118G11			
SQ4	Microinterruttore/Microswitch	TELEMECANIQUE XCKN2118G11			
T1	Timer/Timer	TMI 8082			
TC1	Trasformatore/Transformer	METH T6-20			
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MISCELATORE PLANETARIO BULL 130/160:distinta materiali

PLANETARY MIXER BULL 130/160:bill of materials

Schemi elettrici:BULL 130_160_1,BULL 130_160_2

Electric diagrams:BULL 130_160_1,BULL 130_160_2

Data emissione:12/10/2011
Date of issue:October 12 2011

	Date of issue:October 12 2011				
	DESCRIZIONE/SPECIFICATION	TIPO/PART NUMBER			
CF1	Inverter/Inverter	MITSUBISHI FR-D740-120-EC			
FU1	Portafusibile/Fuseholder	ABB E93/32			
	Fusibile/Fuse	ITALWEBER 1422012			
[Fusibile/Fuse	ITALWEBER 1422012			
	Fusibile/Fuse	ITALWEBER 1422012			
FU2	Portafusibile/Fuseholder	ABB E91/32			
	Fusibile/Fuse	ITALWEBER 1421001			
KM1	Contattore/Contactor	ABB B7-30-10			
KM2	Contattore/Contactor	ABB B6-30-01			
KM3	Contattore/Contactor	ABB B6-30-01			
HL1	Led/Led	ELFIN 010BA9SLB24			
MD1	Rilevatore sequenza fase/Phase Sequence Supervisor				
P1	Potenziometro/Potentiometer	PT 1K1G			
QS1	Interruttore/Main Switch	AB 194E-E16-1753			
TiY.'	Finitura/Actuator	AB 194L-HE6N-175			
SB1	Pulsante/Pushbutton	ELFIN 020PTAARK			
JD1	Contatto/Contact	ELFIN 020E01			
 SB2	Pulsante/Pushbutton	ABB E05499			
ODZ					
	Flangia/Flange	ABB 5697			
	Portalampada/Lampholder	ABB E05820			
	Contatto/Contact	ABB 5713			
	Contatto/Contact	ABB EO5705			
	Contatto/Contact	ABB EO5705			
SA1	Selettore/Selector switch	ELFIN 020STAMONKC			
	Flangia/Flange	ELFIN 020G			
	Contatto/Contact	ELFIN 020E10			
	Contatto/Contact	ELFIN 020E10			
SQ1	Microinterruttore/Microswitch	PIZZATO FF4515-2DN			
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SQ4	Microinterruttore/Microswitch	TELEMECANIQUE XCKN2118G11			
T1	Timer/Timer	TMI 8082			
TC1	Trasformatore/Transformer	METH T6-20			