

ALSATOM MB1/MC ALSATOM MB1-A/MC

WITH AUTOMATIC TIMER

ELECTROSURGICAL UNITS
FOR MEDIUM SURGERY



Quality System Certification



ISO 9001/EN 46001



CE 0051

New ALSATOM MB1/MC are two electrosurgical units designed for use in the field of minor and medium surgery manufactured according to the most advanced electronic technology known in the world today for this kind of application: by means of microprocessors; a new era in the field of electrosurgical units so as to guarantee maximum safety and the best performances. Maximum safety because it's possible to check wholly the operation by autodiagnosis devices which avoid any risk by measuring power delivery too and blocking it in case exceeds the values selected in the event of anomalies. Best performances because they automatically get optimum cut and coagulation according to the various tissue structures so as to ensure the best results (very fine and precise operation) with the lowest power possible. Highly interesting for constructing technology and very complete performances ALSATOM MB1/MC and ALSATOM MB1-A/MC can meet at max every need in all surgery fields: endoscopy, included the urological one in ambulatory, dermatology, otorhinolaryngology, gynaecology, general surgery, plastics, ophthalmology and so on. Two units have same performances and powers, but ALSATOM MB1-A/MC is equipped, in addition to the operating pedal switch as ALSATOM MB1/MC, with a timer adjustable with times from 1 to 99/100 of second and double way of use: pulsed type and superpulsed.

COMPLETE OVERALL PERFORMANCE

Five currents, micro regulation and direct reading on display, to meet every need:

- Pure cut not coagulating with sinusoidal, not modulated output (for biopsy, cutaneous cut, uterine conization in gynaecology etc.)
- Modulated, coagulating cut with efficient haemostatic effect (for polypectomies, papillomies and operations in laparoscopy or gynaecology, for otorhinolaryngology etc.)
- SOFT coagulating (for surgical forceps use or ball electrodes, for endoscopic use in urology or laparoscopy, for all micro coagulations as for ex. epilation, telangiectasis, the spider naevi etc.)
- FORCED coagulation, for coagulations even without electrode contact with the tissues (for those methods needing small size electrodes as for ex, loop type in polypectomies, needle type or for conization in gynaecology, the ones for verruca, angioma and other superficial pathology in dermatology etc.)
- Bipolar coagulation suited both for the various classical uses and with bipolar electrodes in laparoscopy or for double needle method for the spider naevi.

CONSTRUCTIONAL TECHNOLOGY

- Real time operating control by means of microprocessor with autodiagnosis, intervention in the event of faults and block of power delivery which must never exceed the values selected.
- Neutral electrode safety circuit with power cut-off and operating sound and light signals.
- Activating pedal control with operating sound and light signals. Pedal is air-type, waterproof and explosion-proof.
- Floating output circuit, the best and only one for patient and operator safety, protected to use defibrillator and filtered both for video camera use and to prevent from neuromuscular excitations.
- Built in accordance with the Safety Standards in force for electrosurgical units at National and International level EN 60601 -2-2 with IMQ homologation.
- The units comes within Class I type CF the best and only one also qualified for cardiosurgery (direct operations).
- Work frequency: 475 KHz.

- Mosfet power R.F. Generator, the best for use without any time limitation with convection cooling without fan.

PROGRAMMABLE TIMER IN MOD. ALSATOM MB1-A/MC

Everybody knows that by employing an electrosurgical unit on very important zones in respect of biological aspect or aesthetical result, it's essential to have the opportunity to check perfectly not only delivered power, but output time too that must be finely adjustable in 1/100 of second and perfectly repeated because only by this way it's possible to reduce as much as possible thermic effect on the tissues near the operation point and obtain, often even without anaesthesia, coagulations and micro coagulations mono and bipolaires extremely delicate and cuts and micro cuts finely executed on the skin too and perfectly saturable. For this aim model ALSATOM MB1-A/MC, in addition to the pedal, is also equipped with an automatic timer adjustable from 1 up to 99/100 p/second that can be used both to deliver single pulses (at each pedal activation) and to deliver series of pulses (during all time when push pedal switch) in case this results more convenient (as for ex. for cut and bipolar coagulation).

ACCESSORIES

Making the choice of the electrodes it's advisable to follow these general cares:

- blade electrodes (knife) and needle types are suitable for cut and incisions. First type have also a secondary effect of coagulation that hardly lack with the second, especially if they have a very fine diameter.
Very fine needle electrodes, insulated or not, are suitable for micro coagulation (depilation, teleangiectasia, and so on) and for incisions of weakly tissues.
- Needle electrodes are suitable for fulguration and desiccation, ball types for coagulations and loop types to level tissues, to mince, for abscissions, biopsy, neoplasm, and so on.
- For use in gynaecology and operations in cavities are suitable long types electrodes having insulated steel available as follows lancet type, needle, ball, loop and LLETZ type.

THE UNITS, THE STANDARD SET OF ACCESSORIES

B180	ALSATOM MB1/MC without accessories
B190	ALSATOM MB1 -A/MC without accessories
B390	Set of standard accessories as follows:
1 STOP/P	Pneumatic, waterproof, explosion-proof pedal switch
1 MPE/S	Sterilizable electrodes-holder handle, cable length m 2.5
1 EIP/9	Neutral electrode with cable length m 2.5
1 FFE	Fixing belt for neutral electrode
1 SEL/VI	Set of 6 electrodes (stainless steel – stem Ø 2 mm) including:
1 EL1	Knife electrode (blade)
1 EL4	Thick needle
2 EL5	Thin needle
1 EL7	Ball electrode Ø 2 mm
1 EL8	Ball electrode Ø 4 mm
B391	Ditto, for dental use, without EIP/9 and SEL/VI, with EIP/S and SEL/D.

GENERAL DETAIL OF ACCESSORIES

ELECTRODES-HOLDER HANDLES AND NEUTRAL ELECTRODES

MPE/S	Sterilizable electrode-holder handle, cable length 2.5 m
EIP/9	Neutral electrode with cable length 2.5 m – stainless steel
NP/GP	Ditto – flexible conductive rubber
EIP/S	Ditto – for dental use

Neutral electrodes are also available provided with additional grounding for flexible endoscopes.

ELETTRODI NEUTRI MONOUSO

CMS/E	Re-usable connection cable 1. 2.5 m
EIP/DA	Adhesive, adult type (25 pcs. each conf.)
EIP/DP	Adhesive, paediatric type (25 pcs. each conf.)

SHORT TYPE ELECTRODES L. 70 mm

In addition to the electrode of the standard set are also available:

EL12	Loop electrode Ø mm 5
EL13	Loop electrode Ø mm 10
EL14	Diamond electrode 5x10 mm
EL15	Diamond electrode 10x10 mm.

LONG TYPE ELECTRODES L. 120 mm (made of stainless steel - stem Ø 2 mm)

EL18	- Lancet electrode (blade)
EL19	- Needle electrode
EL20	- Thin needle electrode
EL21	- Loop electrode Ø 5 mm
EL24	- Loop electrode Ø 10 mm
EL25	- Loop electrode Ø 15 mm
EL27	- Ball electrode Ø 2 mm
EL30	- Ball electrode Ø 4 mm
EL40	- Lletz electrode loop type 10x7
EL41	- » » » » 10X10
EL45	- » » » » 15X8
EL46	- » » » » 15X10
EL48	- » » » » 20x8
EL49	- » » » » 20x10
EL50	- » » » » 20x15
EL51	- » » » » 20x20
EL60	- » » square loop 10x5
EL61	- » » » » 10x81
EL62	- » » » » 10x10.

FOR DIFFERENT CONNECTIONS (endoscopes and so on)

RD70	- Adaptor for plugs size Ø from 2 to 8 mm
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HANDLES AND NEEDLES FOR MICRO SURGERY

MLD	- Light needles-holder with cable - sterilizable
MID	- Needles-holder (to use with MPE/S)
AID	- Insulated needle - Ø 0.10 mm - for depilation
SAD	- Set of 12 needles – long type – not insulated - Ø 0.10 mm for depilation and fine cut
SAD/1	- Ditto, Ø 0.15 mm - for teleangiectasia, face depilation and fine cut
SAD/2	- Ditto, Ø 0.20 mm – for body depilation, lower limbs teleangiectasia, peeling and fine cut
SAD/3	- Ditto, Ø 0.40 mm – for micro coagulation and fine cut.

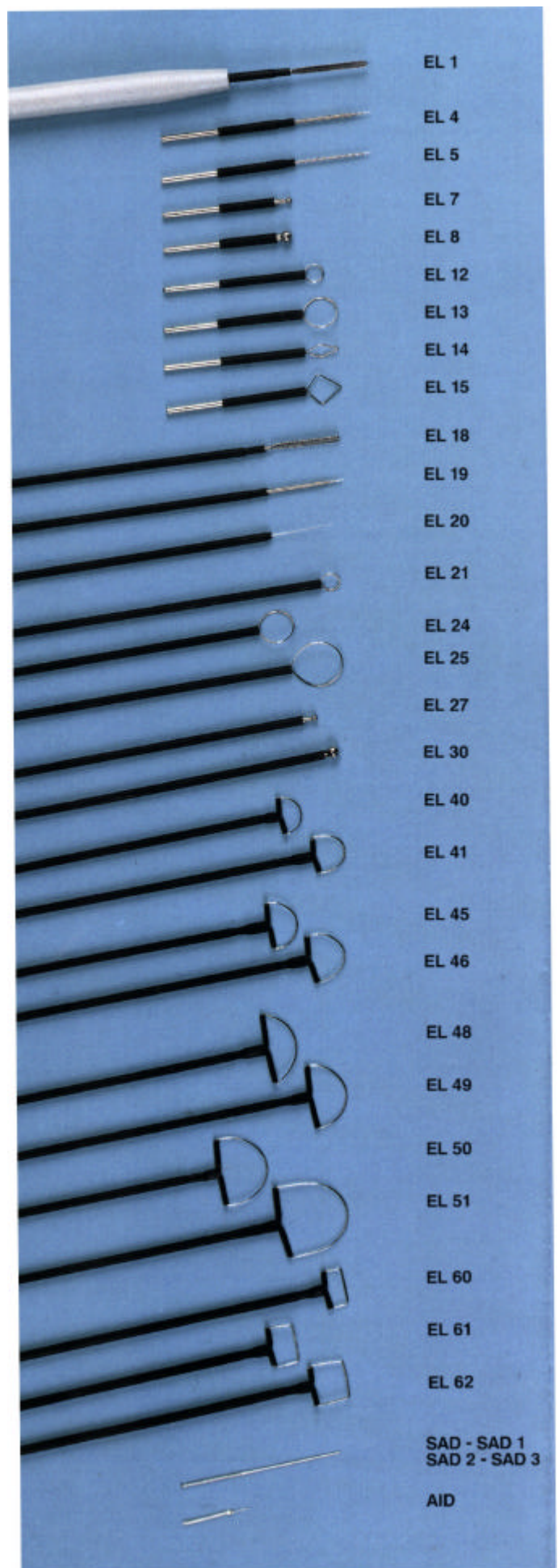
PINZE PER BICOAGULAZIONE

CPB	- Connecting cable, length 3 m
PBC/R	- Insulated, straight type (tips 2 mm – length 20 cm)
PBC/C	- Ditto, bent type
PMC/R	- Insulated, straight type (tips 1 mm - length 20 cm)
PMC/C	- Ditto, bent type
PMC/RS	- Insulated, straight type (tips 0.5 mm – length 16.5 cm)
PMC/CS	- Ditto, bent type

For other requests please ask for details.

TROLLEY AND PEDAL SWITCH

H10	- Two-shelves trolley on castors – breadth 41 cm – depth 36 cm – height 75 cm
STOP/P	- Pneumatic, waterproof, explosion-proof pedal switch.



TECHNICAL DATA

Electronic generator according to the Safety Standards	IEC 601-2-2
Classification and Type	I-CF
Output circuit	Floating - protected against defibrillator discharge
Mains and absorption	220 VAC / 50 Hz – 225 VA
Cooling	Convection - cooling without fan
Monopolar and bipolar frequency	475 kHz
Adjusting and reading of powers	By push-button with stepped and fast changing – display read out
Running controls	By pedal with acoustic signals and pilot lights Real time by microprocessor
Neutral electrode safety	Cable continuity – Acoustic signal and pilot light of alarm stopping power
Storage	Powers
Timer (mod. ALSATOM MB1-A/MC)	It can be inserted and adjusted from 1 to 99 cent of secs
Dimensions and weight	cm 31 x 28 x 11 – kg 7.8

OUTPUT POWERS, OPEN CIRCUIT PEAK TO PEAK VOLTAGES AND CREST FACTORS

Pure cut	150 W RMS @ 500 ohms	– 960 Vpp	– 1.83
Blend cut	140 W RMS @ 500 ohms	– 1500 Vpp	– 3.02
FORCED coagulation	70 W RMS @ 500 ohms	– 3000 Vpp	– 7.04
SOFT coagulation	140 W RMS @ 500 ohms	– 1200 Vpp	– 2.54
BIPOLAR coagulation	60 W RMS @ 100 ohms	– 300 Vpp	– 1.55

ALSA

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