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The Martin ME 400 and ME 200 Electrosurgical units Combining the most modern technology and safety on the highest level

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In the use of surgical diathermy, the technical ability of the unit combined with plain safety are of prime importance - both for the patient and the user. There must be no possibility of accidental, undesirable results in the use of such a unit.

With these points in mind and with the introduction of a new high frequency generator technology the new era of Martin electrosurgical units have been developed.

The Martin ME 400 and ME 200 are newly developed electrosurgical units of particular safety and reliability. The ME 200 may be seen as a standard unit for use in general surgery and the ME 400 as the most refined unit of its kind in the world.

Safety in use

The technical conceptions of the Martin ME 400 and ME 200 meet the requirements of highly refined, electrosurgical techniques and all national and international safety standards are conformed to or exceeded. In accordance with the German laid down standard (MedGV paragraph 3), the unit is automatically switched off in the event of malfunction and it is not possible for the unit to deliver a higher output than has been set on the controls.

The integrated Martin Patient Control System (PCS), continually monitors patient contact with the negative electrode.

The micro function allows for an instant reduction in output for more delicate applications such as neurological or micro surgery.

The URO-Cut circuit is of considerable assistance during T.U.R. and other endoscopic procedures. The danger of deeper tissue burning is avoided by initially boosting output until the initial arc is struck. Thereafter, the output is instantly reduced to the operator, pre-set level.

The unit is not affected during the use of a defibrillator.

Particular advantages from the newly developed generators with F.S.G. technology:

- Automatic output adjustment dependent on tissue impedance
- Due to the high efficiency of the generators, no cooling is necessary and the unit is a sealed cabinet
- For the first time with two separate generators which may be used simultaneously (dual application)
- Two separate outlets for mono-polar use
- Two separate outlets for bi-polar use
- "URO-CUT" circuitry electronically controls the initial arc in T.U.R., papilectomy and polypectomy situations
- Negative electrode monitoring via a patient contact control system (PCS)
- Seven different current types
- All current types may be selected via hand or foot switch
- A micro function which provides an additional, instant output control
- A complete range of the highest quality accessories

Simple and safe operation

All the operating controls and user connecting sockets are positioned at the front of the unit. The three control knobs are situated so as make their function clear and obvious. Rotation of the control knobs shows the output both on the analogue scales and digitally, from one (1) to full power at 10.

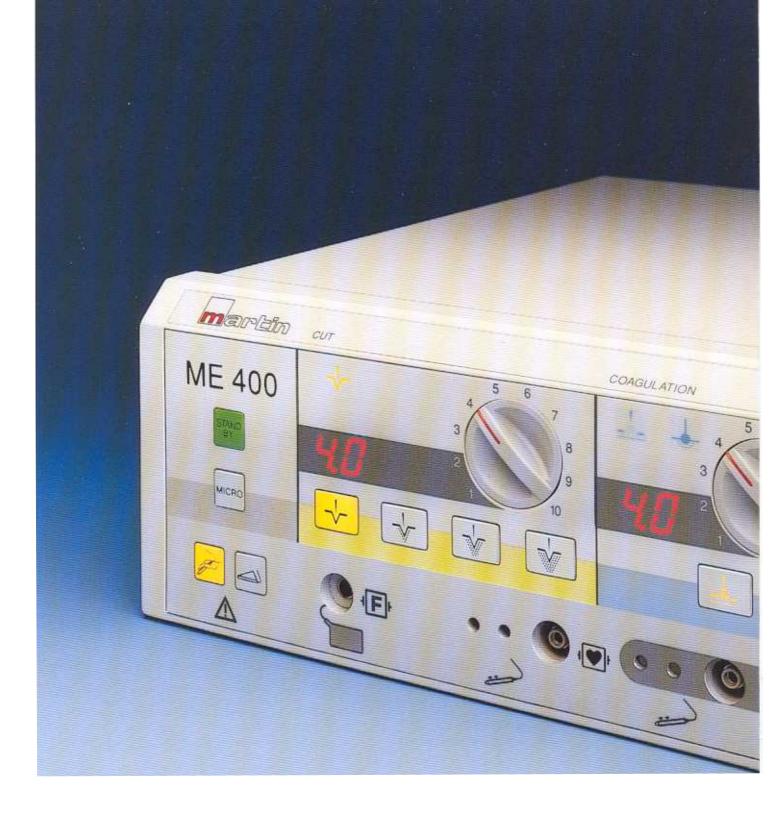
Illuminated, pressure sensitive switches, clearly show the functional settings of the unit.

Of particular interest are the two, individual generators which for the first time allow for the simultaneous application of both mono and bi-polar current (dual application)

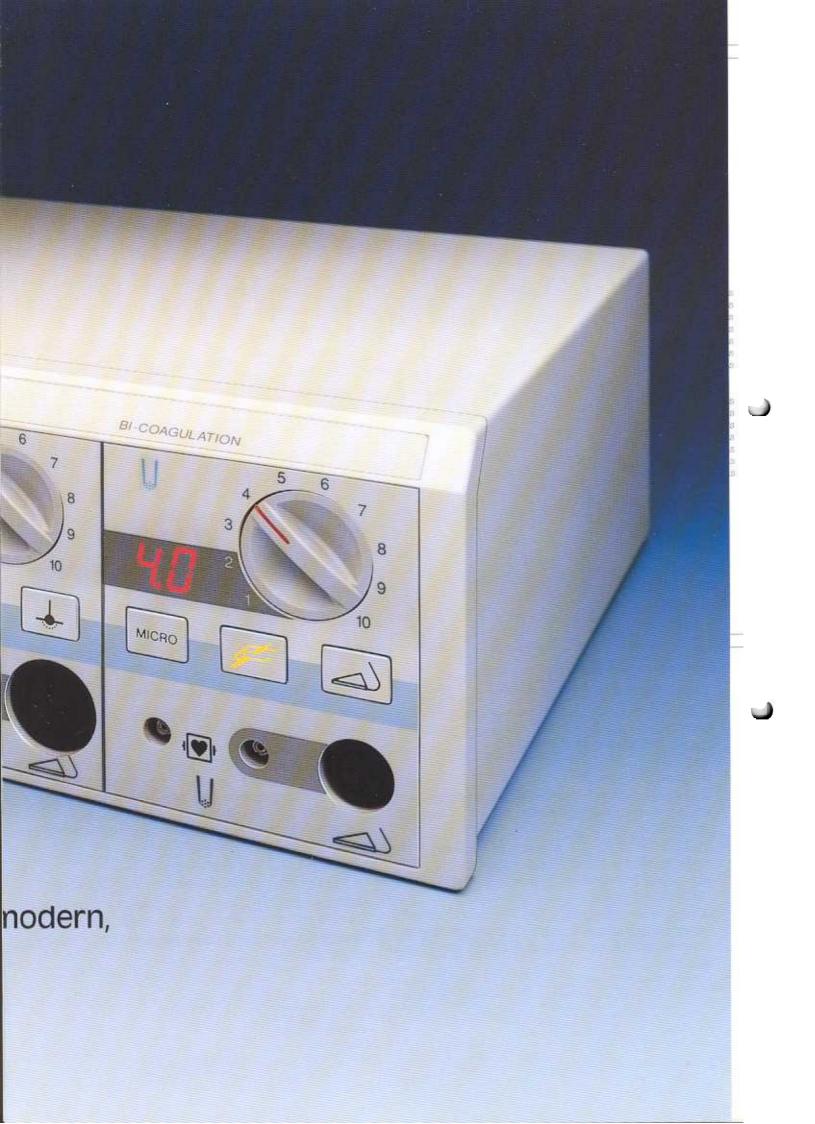
Both the mono-polar and bi-polar generators have two outlets either of which (via internal, automatic switching) may be operated on a priority basis. Coagulation always has priority over cutting in the mono-polar mode.

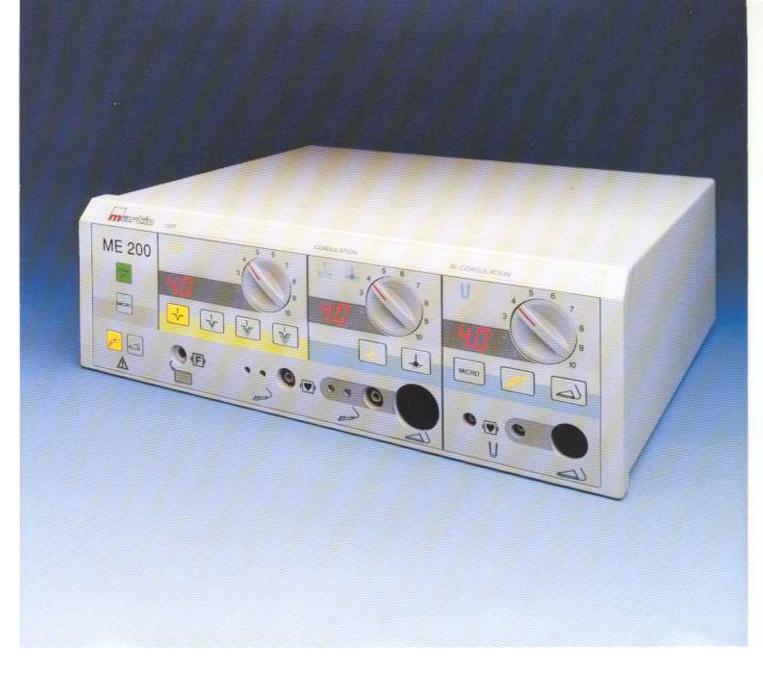
All circuits may be activated by hand or foot switching.

All sockets are clearly marked and will not accept false connections.



Mart n ME 400 Answering the most demand ng needs of h gh frequency electrosurg ca techn ques





Versatility in use

Output of the seven available types of current is controlled according to the variable impedance values of the tissues being worked on.

Ease of cleaning

The face of the unit with its pressure sensitive switches may be surface disinfected with a suitable damp cloth.

The bodies of the ME 400 and ME 200 are of specially treated aluminium and robust plastic. The aluminium is protected against oxidation caused by A full selection of neutral electrodes is available. disinfecting fluids.

A further point towards good hygiene is the efficient design of the high frequency generators. They do not require cooling slits and the body is a sealed unit.

Precise, "thought-out" accessories

The standard accessories make the Martin ME 400 and ME 200 exceptionally versatile and responsive to the surgeons needs.

Together with a large selection of active electrodes and ergometrically designed hand-pieces with or without finger switches - the system offers an individually adaptable, non problematic approach to the most demanding electrosurgical techniques.

Both hand and foot switching is possible.

Both standard and an operating theatre type (ex-

plosion proof) foot-switches are available.

Martin has designed a new series of forceps for bipolar use.

Technical data of the Martin ME 400		Technical data of the Martin ME 200	
Mains voltage	110/120 V 220/240 V	Mains voltage	110/120 V 220/240 V
Protection class		Protection class	-
Type of output	CF	Type of output	CF
Leakage LF and HF	in accordance with IEC 601 part 2.2	Leakage LF and HF	in accordance with IEC 601 part 2.2
Nominal frequency	500 kHz	Nominal frequency	500 kHz
Impulse frequency	30 kHz	Impulse frequency	30 kHz
Crest Factors	1	Crest Factors	
Current type SPRAY COAGULATION	8.0	Current type SPRAY COAGULATION	8.0
Current type CONTACT COACULATION	5.0	Current type CONTACT COAGULATION	5.0
Current type CUTTING 1	1.5	Current type CUTTING 1	1.5
Current type CUTTING 2	2.2	Current type CUTTING 2	2.2
Current type CUTTING 3	3.0	Current type CUTTING 3	2.6
Current type CUTTING 4	4.3	Current type CUTTING 4	3.0
High frequency output, Macro mode		High frequency output, Macro mode	
Current type SPRAY COAGULATION	100 Watts at 500 Ohms	Current type SPRAY COAGULATION	00 Watts at 500 Ohms
Current type CONTACT COAGULATION	250 Watts at 300 Ohms	Current type CONTACT COAGULATION	75 Watts at 300 Ohms
Current type CUTTING 1	330 Watts at 500 Ohms	Current type CUTTING 1	75 Watts at 500 Ohms
Current type CUTTING 2	300 Watts at 500 Ohms	Current type CUTTING 2	75 Watts at 500 Ohms
Current type CUTTING 3	300 Watts at 500 Ohms	Current type CUTTING 3	75 Watts at 500 Ohms
Current type CUTTING 4	300 Watts at 500 Ohms	Current type CUTTING 4	75 Watts at 500 Ohms
BIPOLAR COAGULATION	70 Watts at 100 Ohms	BIPOLAR COAGULATION	70 Watts at 100 Ohms
Micro mode		Micro mode	
Current type SPRAY COAGULATION	35 Watts at 500 Ohms	Current type SPRAY COAGULATION	35 Watts at 500 Ohms
Current type CONTACT COAGULATION	80 Watts at 300 Ohms	Current type CONTACT COAGULATION	60 Watts at 300 Ohms
Current type CUTTING 1	100 Watts at 500 Ohms	Current type CUTTING 1	60 Watts at 500 Ohms
Current type CUTTING 2	100 Watts at 500 Ohms	Current type CUTTING 2	60 Watts at 500 Ohms
Current type CUTTING 3	100 Watts at 500 Ohms	Current type CUTTING 3	60 Watts at 500 Ohms
	100 Watts at 500 Ohms	Current type CUTTING 4	60 Watts at 500 Ohms
Current type CUTTING 4		BIPOLAR COAGULATION	20 Watts at 100 Ohms
BIPOLAR COAGULATION Weight	20 Watts at 100 Ohms 11.6 kg	Weight	9.6 kg
	2	D imono i con	
Dimensions	100	Dimensions	105
Height	135 mm	Height	135 mm
Width	405 mm	Width	405 mm
Depth	380 mm	Depth	380 mm
Interference suppression	limits in accordance with VDE 0871	Interference suppression	limits in accordance with VDE 0871
CE marking conform with 93/42/EEC		CE marking conform with 93/42/EEC	
Ordering Data		Ordering Data	kinan matalo formationi a terra and

80-040-00 Martin ME 400 Electrosurgical unit with mains cable, without accessories
80-140-00 Set of accessories for manual switching, large
80-140-01 Set of accessories for foot switching, large
80-140-02 Set of accessories for manual switching, small 80-020-00 Martin ME 200 Electrosurgical unit with mains cable, without accessories
80-120-00 Set of accessories for manual switching, large
80-120-01 Set of accessories for foot switching, large
80-120-02 Set of accessories for manual switching, small



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