

martin



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

www.martin-med.com

The Martin ME 400 and ME 200 Electrosurgical units

Combining the most modern technology and safety on the highest level

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.



Martin ME 400

Answering the most demanding needs of high frequency electrocauter techniques



BI-COAGULATION

4.0

MICRO

modern,



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 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 ergonomically 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.

A full selection of neutral electrodes is available.

Both standard and an operating theatre type (explosion proof) foot-switches are available.

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

Technical data of the Martin ME 400

Mains voltage	110/120 V 220/240 V
Protection class	CF
Type of output	in accordance with IEC 601 part 2.2
Leakage LF and HF	
Nominal frequency	500 kHz
Impulse frequency	30 kHz

Crest Factors

Current type SPRAY COAGULATION	8.0
Current type CONTACT COAGULATION	5.0
Current type CUTTING 1	1.5
Current type CUTTING 2	2.2
Current type CUTTING 3	3.0
Current type CUTTING 4	4.3

High frequency output, Macro mode

Current type SPRAY COAGULATION	100 Watts at 500 Ohms
Current type CONTACT COAGULATION	250 Watts at 300 Ohms
Current type CUTTING 1	330 Watts at 500 Ohms
Current type CUTTING 2	300 Watts at 500 Ohms
Current type CUTTING 3	300 Watts at 500 Ohms
Current type CUTTING 4	300 Watts at 500 Ohms
BIPOLAR COAGULATION	70 Watts at 100 Ohms

Micro mode

Current type SPRAY COAGULATION	35 Watts at 500 Ohms
Current type CONTACT COAGULATION	80 Watts at 300 Ohms
Current type CUTTING 1	100 Watts at 500 Ohms
Current type CUTTING 2	100 Watts at 500 Ohms
Current type CUTTING 3	100 Watts at 500 Ohms
Current type CUTTING 4	100 Watts at 500 Ohms
BIPOLAR COAGULATION	20 Watts at 100 Ohms
Weight	11.6 kg

Dimensions

Height	135 mm
Width	405 mm
Depth	380 mm

Interference suppression limits in accordance with VDE 0871

CE marking conform with 93/42/EEC

Ordering Data

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

Technical data of the Martin ME 200

Mains voltage	110/120 V 220/240 V
Protection class	-
Type of output	CF
Leakage LF and HF	in accordance with IEC 601 part 2.2
Nominal frequency	500 kHz
Impulse frequency	30 kHz

Crest Factors

Current type SPRAY COAGULATION	8.0
Current type CONTACT COAGULATION	5.0
Current type CUTTING 1	1.5
Current type CUTTING 2	2.2
Current type CUTTING 3	2.6
Current type CUTTING 4	3.0

High frequency output, Macro mode

Current type SPRAY COAGULATION	90 Watts at 500 Ohms
Current type CONTACT COAGULATION	75 Watts at 300 Ohms
Current type CUTTING 1	75 Watts at 500 Ohms
Current type CUTTING 2	75 Watts at 500 Ohms
Current type CUTTING 3	75 Watts at 500 Ohms
Current type CUTTING 4	75 Watts at 500 Ohms
BIPOLAR COAGULATION	70 Watts at 100 Ohms

Micro mode

Current type SPRAY COAGULATION	35 Watts at 500 Ohms
Current type CONTACT COAGULATION	60 Watts at 300 Ohms
Current type CUTTING 1	60 Watts at 500 Ohms
Current type CUTTING 2	60 Watts at 500 Ohms
Current type CUTTING 3	60 Watts at 500 Ohms
Current type CUTTING 4	60 Watts at 500 Ohms
BIPOLAR COAGULATION	20 Watts at 100 Ohms
Weight	9.6 kg

Dimensions

Height	135 mm
Width	405 mm
Depth	380 mm

Interference suppression limits in accordance with VDE 0871

CE marking conform with 93/42/EEC

Ordering Data

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



Gebrüder Martin GmbH & Co. KG
Ludwigstaler Straße 132 · D-78532 Tuttlingen
Postfach 60 · D-78501 Tuttlingen · Germany
Telefon +49 74 61 706-0 · Telefax +49 74 61 706-193
info@martin-med.com
www.martin-med.com

03.04 · 90-386-02-04 · Printed in Germany
Copyright by Gebrüder Martin GmbH & Co. KG
Alle Rechte vorbehalten.
Technische Änderungen vorbehalten.
We reserve the right to make alterations.
Cambios técnicos reservados.
Sous réserve de modifications techniques
Ci riserviamo il diritto di modifiche tecnic