



KLS Martin ME 102

*The compact Electrosurgical Unit
with high Capacity*



The KLS Martin ME 102 is a 100-W class, universally applicable HF electrocautery unit with excellent cutting and coagulation characteristics. It has been designed to satisfy the special demands of clinical and outpatient applications.

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The compact Electrosurgical Unit with high Capacity

Features at a glance

- Smooth or scabbed cut thanks to 100-W power generator
- 80-W bipolar output power
- Automatic power adaptation to different cutting speeds and tissue impedances
- Contact coagulation for fast hemostasis
- HF activation via manual switch or foot switch
- High-precision dosage thanks to stepless output power regulation for any mode of operation
- Easy and safe handling
- Clear front panel layout
- MICRO switch for high-precision and micro-surgery
- Neutral-electrode (NE) monitoring
- Bipolar „Auto-Coag-Start“ function
- CF-type connection for utmost patient safety
- Memory function

KLS Martin ME 102 HF Surgical Unit



① *MICRO function*

The MICRO function key of the KLS Martin ME 102 reduces output power to about one third. This allows high-precision power dosage by means of the 270-degree rotary switch. The MICRO function is available for all operating modes.

② *”Monopolar CUT“ function*

The KLS Martin ME 102 provides two different cutting currents:

- Monopolar cutting 1 for a smooth, scab-free cut
- Monopolar cutting 2 for a smooth cut with some scab formation

③ *High degree of patient safety thanks to neutral-electrode (NE) monitoring*

The integrated KLS Martin NE monitoring system automatically recognizes whether a single or a splitneutral electrode is connected. In the latter case (using for instance KLS Martin Twin-Pad), the ME 102 ensures continuous NE monitoring. Whenever there is insufficient contact between the electrode and the patient, an optical and acoustical alarm signal is triggered and HF power output is blocked immediately.



④ *Individual power setting*

The large, 270-degree rotary switch allows straightforward and easy-to reproduce output power setting.

⑤ *Socket for monopolar handles or instruments*

The ME 102 allows connection of monopolar handles and instruments fitted with either the KLS Martin coaxial connector or a US 3-pin connector. The KLS Martin range of accessories provides a comprehensive selection of instruments for different indications.

⑥ *Bipolar „automatic start“ function*

The KLS Martin ME 102 allows bipolar coagulation to be started automatically as soon as the two branches of the instrument get into contact with the tissue. Alternatively, the HF current may be activated via the foot switch.

⑦ *Socket for the bipolar instrument*

In many fields, bipolar coagulation is the method of choice. With its 80-W generator, the KLS Martin ME 102 is well suited to any bipolar application.

Accessory Sets

High-quality and safe Accessories



| 80-108-00-04 | Set accessories ME 102 for hand switch operation, large, consisting of: |
|--------------|---|
| 80-217-02-04 | Electrode handle with double finger switch and connection cable of 4 m |
| 80-332-03-04 | Rubber neutral electrode, 8 x 16 cm, with connection cable of 4 m |
| 80-370-50-04 | Rubber band, perforated, 50 cm |
| 80-371-01-04 | Button for rubber band |
| 80-408-00-04 | Electrode box for 8 electrodes |
| 80-505-00-04 | Cleaning pad for electrodes, sterile packed* |
| 80-510-04-04 | Lancet electrode, straight |
| 80-515-04-04 | Knife electrode |
| 80-520-04-04 | Needle electrode |
| 80-525-04-04 | Doz. needle electrodes, extra fine |
| 80-532-00-04 | Adapter for needle electrodes |
| 80-540-04-04 | Wire loop electrode, Ø 5 mm |
| 80-542-04-04 | Wire loop electrode, Ø 10 mm |
| 80-560-04-04 | Ball electrode, Ø 2 mm |
| 80-562-04-04 | Ball electrode, Ø 4 mm |

* SU = 100/pack

| 80-108-02-04 | Set accessories ME 102 for hand switch operation, small, consisting of: |
|--------------|---|
| 80-217-02-04 | Electrode handle with double finger switch and connection cable of 4 m |
| 80-332-03-04 | Rubber neutral electrode, 8 x 16 cm, with connection cable of 4 m |
| 80-372-00-04 | Textile band with velcro strap, 90 cm |
| 80-505-00-04 | Cleaning pad for electrodes, sterile packed* |
| 80-511-04-04 | Lancet electrode, angular |
| 80-515-04-04 | Knife electrode |
| 80-520-04-04 | Needle electrode |
| 80-562-04-04 | Ball electrode, Ø 4 mm |

* SU = 100/pack

| 80-108-01-04 | Set accessories ME 102 for foot switch operation, large, consisting of: |
|--------------|---|
| 80-220-00-04 | Electrode handle without switch, with connection cable of 4 m |
| 80-332-03-04 | Rubber neutral electrode, 8 x 16 cm, with connection cable of 4 m |
| 80-370-50-04 | Rubber band, perforated, 50 cm |
| 80-371-01-04 | Button for rubber band |
| 80-408-00-04 | Electrode box for 8 electrodes |
| 80-505-00-04 | Cleaning pad for electrodes, sterile packed* |
| 80-510-04-04 | Lancet electrode, straight |
| 80-515-04-04 | Knife electrode |
| 80-520-04-04 | Needle electrode |
| 80-525-04-04 | Doz. needle electrodes, extra fine |
| 80-532-00-04 | Adapter for needle electrodes |
| 80-540-04-04 | Wire loop electrode, Ø 5 mm |
| 80-542-04-04 | Wire loop electrode, Ø 10 mm |
| 80-560-04-04 | Ball electrode, Ø 2 mm |
| 80-562-04-04 | Ball electrode, Ø 4 mm |
| 80-823-02-04 | Double-pedal foot switch, with connection cable of 5 m |
| 80-824-01-04 | Double-pedal foot switch, monopolar, explosion- and anesthetics-proof (AP-tested) |

* SU = 100/pack

| Ordering Data | |
|---------------|--|
| 80-010-02-04 | Electrosurgical unit KLS Martin ME 102 with mains cable, without accessories |



Our Accessories Catalog contains KLS Martin's entire range of electrocautery instruments. Just contact us to get your personal copy! (90-302-48-07)

Technical Data

| | |
|----------------------|---|
| Power requirements | 100-127 VAC/220-240 VAC; 50/60 Hz |
| Line fuses | 100-127 V: T 2.0 A (slow-blow.) 220-240 V: T 1.0 A (slow-blow.) |
| Power input | without HF output approx. 16 VA at max. power output approx. 180 VA |
| Class of protection | I |
| Nominal frequency | 500 kHz |
| Modulation frequency | 30 kHz |
| Mode of operation | intermittent INT 10 s/30 s; corresponds to a duty factor of 25% |

HF output values

Type of current:

| MACRO mode | Power |
|---------------------|---------------------|
| CUT 1 | max. 100 W at 600 Ω |
| CUT 2 | max. 90 W at 600 Ω |
| Contact coagulation | max. 70 W at 600 Ω |
| Bipolar coagulation | max. 80 W at 100 Ω |

Type of current:

| MACRO mode | Power |
|---------------------|--------------------|
| CUT 1 | max. 30 W at 600 Ω |
| CUT 2 | max. 30 W at 600 Ω |
| Contact coagulation | max. 25 W at 600 Ω |
| Bipolar coagulation | max. 25 W at 100 Ω |

| | |
|------------------------------|--|
| Interference suppression | Limit values as per EN 55011 and IEC 601-2-2 |
| Interference immunity | as per IEC 801 |
| Classification as per MDD | II b |
| LF and HF leakage currents | as per IEC 601, Part 2-2 |
| Type of equipment | CF; defibrillator-proof |
| Dimensions | Width 256 mm Height 97 mm Depth 320 mm |
| Weight | approx. 4.6 kg |
| CE Marked in conformity with | 93/42/EEC |

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