



Electrothermal

Electromantle®

Heating Mantles

Our original "ElectroMantles" were among the first laboratory flask heaters to incorporate the ingenious coiled flexible heating element. This design facilitated an intimate contact with the flask thus optimizing heat transfer.

The basic principal has remained the same for many years and has been copied the world over. Electrothermal have benefitted from many years of experience and remained at the forefront of laboratory heating and controlling technology and design.

The EM series feature:

- A chemically resistant plastic outer casing.
- Cool-to-the-touch design.
- A grounded earth screen and double fuses for added safety.



EM Heating Mantles

Introducing the Electromantle®

Our aim is to produce heating mantles that give users the benefit of our extensive knowledge in this field coupled with the reliability we have all come to expect and enjoy. By calling on our years of experience and our thirst for continuous improvement we are able to provide robust economical products that serve many different applications and industries.

- Cool-to-the-touch design.
- Element temperature 450°C
- Built-in energy regulator
- Replaceable insulated heater cartridge
- Indicator lamps for power and heater operation
- A chemically resistant plastic outer casing.
- A grounded earth screen and double fuses for added safety
- One year warranty parts and labour



Robust and economical

Designed with simplicity, flexibility and ease of use

The EM series ElectroMantle® is designed to be the work horse for your heating applications. Designed with simplicity, ease of use and flexibility in mind the EM series can perform many heating tasks in the busy laboratory. All EMs have a built in energy regulator with indicator lamps for power and heater operation. All mantles have support rod clamps designed in as an integral feature. All mantles have support rod clamps designed in as an integral feature. All mantles incorporate a grounded earth screen and double fuses for added safety. Larger capacity products have multiple heating element enabling a more even and accurate transfer of heat.

For more information, please visit: <http://www.electrothermal.com/product.asp?dsl=750>



EMA Heating Mantles

Introducing the stirring Electromantle®

The EMA stirring Electromantle shares all the standard features of the standard EM but has the added functionality of magnetic stirring. The solid state stirring circuitry is built into the base of the main housing and provides powerful stirring over a range of capacities and viscosities. The stir speed is easily adjusted and is bi-directional. The stir bar is seldom lost due to our "auto-recapture" function.

- Bi directional stirring speeds up to 520rpm
- Stir bar "auto-recapture" function.
- Cool-to-the-touch design.
- Element temperature 450°C
- Built-in energy regulator
- Replaceable insulated heater cartridge
- Indicator lamps for power and heater operation
- A chemically resistant plastic outer casing.
- A grounded earth screen and double fuses for added safety
- One year warranty parts and labour



Magnetic stirring

Solid state magnetic stirring

The EMA stirring Electromantle® has the added functionality of in solution stirring which widens the range of applications. Stirring operation is simply achieved by placing the correct size stir bar in to the flask, turning the stir control to the minimum speed and ramping up slowly.

If the magnetic coupling to the stir bar is lost for any reason the speed control should be reduced slightly and the auto-recapture switch can be activated.



EMV and EMX Heating Mantles

Spill-proof and V-shaped Electromantle®

The EMX and EMV Electromantle® share the standard features of the standard EM but have the added functionality of a bottom opening which allows 60° funnels of various sizes to be heated.

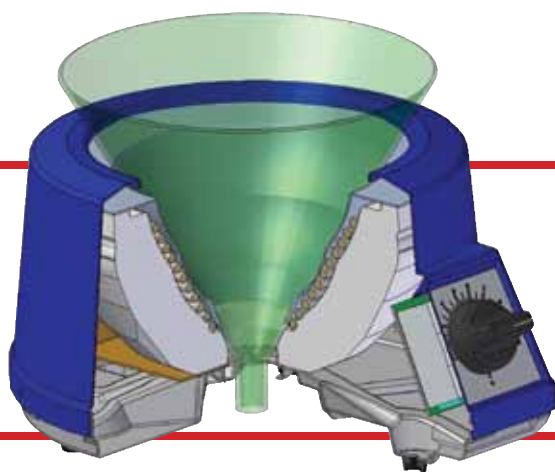
- Bottom opening accommodates 60° funnels of various diameters
- Cool-to-the-touch design.
- Element temperature 450°C
- Built-in energy regulator
- Replaceable insulated heater cartridge
- Indicator lamps for power and heater operation
- A chemically resistant plastic outer casing.
- A grounded earth screen and double fuses for added safety
- One year warranty parts and labour



EMV

V-Shaped Mantle

Stainless steel screen on all EMV models cover the heated elements to protect you from shock hazards due to spills or flask breakage



EMX

Spill-proof Mantle

Stainless steel liner on all EMX models provide electrical and mechanical protection against spills and ensures easy cleaning



For more information, please visit: <http://www.electrothermal.com/product.asp?dsl=754>

Key features

- Conical shaped heating element directs radiant heat to the top cavity
- Top cowl deflects heat away from your hand
- Air circulation from the vented housing keeps the base cool enough to hold during operation
- Burner consumes only 400w of power
- Recommended controller, MC5.
- One year warranty parts and labour



Electric Bunsen

Electrothermal Electric Bunsens combine the advantages of a regular gas burner with the clean, easy operation of our electric heaters. Corrosion-resistant and cool-to-the-touch base. Radiation from the heater is directed upwards to a focal point. The Electric Bunsen is ideal for heating test tubes, crucibles, small flasks and beakers, regardless of their shape.

MC5 Controller

The MC5 Controller has been designed to provide a comprehensive answer to control the heating of resistive loads such as Electric Bunsen, Heating Mantles, Heating Tapes and Cords for bench top operation delivering up to a maximum of 800Watts. A rod support clamp is provided at the rear of the controller to take a standard 12.5mm diameter rod. An accessory extension mains lead is available where remote operation is required e.g. in a fume extraction unit.

Ordering

<u>Bunsen Without Controller</u>	<u>Electrical supply</u>	<u>Controller</u>	<u>Electrical supply</u>
BA6101	230V 50/ 60Hz, 480w	MC5	230v
BA6101X1	115v 50/ 60Hz, 430w	MC5X6	230v, EU Plug
BA6101X2	100v 50/ 60Hz, 480w		
BA6101X3	90v 50/ 60Hz, 430w		
BA6101X6	230v 50/ 60Hz, 480w, EU Plug		
<u>Bunsen With Controller</u>	<u>Electrical supply</u>		
BA6101/C	230v 50/ 60Hz, 480w		
BA6101/CX1	115v 50/ 60Hz, 430w		
BA6101/CX6	230v 50/ 60Hz, 480w, EU Plug		



For more information, please visit: <http://www.electrothermal.com/product.asp?dsl=769>

EM Series Electromantle®

Technical information

Model	Capacity	Electrical Requirement
EM0050/CE	50ml	230v 50/ 60Hz, 60w
EM0050/CEX1	50ml	115v 50/ 60Hz, 70w
EM0050/CEX6	50ml	230v 50/ 60Hz, 60w, EU Plug
EM0100/CE	100ml	230v 50/ 60Hz, 60w
EM0100/CEX1	100ml	115v 50/ 60Hz, 70w
EM0100/CEX6	100ml	230v 50/ 60Hz, 60w, EU Plug
EM0250/CE	250ml	230v 50/ 60Hz, 150w
EM0250/CEX1	250ml	115v 50/ 60Hz, 150w
EM0250/CEX6	250ml	230v 50/ 60Hz, 150w, EU Plug
EM0500/CE	500ml	230v 50/ 60Hz, 200w
EM0500/CEX1	500ml	115v 50/ 60Hz, 200w
EM0500/CEX6	500ml	230v 50/ 60Hz, 200w EU Plug
EM1000/CE	1000ml	230v 50/ 60Hz, 300w
EM1000/CEX1	1000ml	115v 50/ 60Hz, 300w
EM1000/CEX6	1000ml	230v 50/ 60Hz, 300w, EU Plug
EM2000/CE	2000ml	230v 50/ 60Hz, 500w
EM2000/CEX1	2000ml	115v 50/ 60Hz, 500w
EM2000/CEX6	2000ml	230v 50/ 60Hz, 500w, EU Plug
EM3000/CE	3000ml	230v 50/ 60Hz, 500w
EM3000/CEX1	3000ml	115v 50/ 60Hz, 500w
EM3000/CEX6	3000ml	230v 50/ 60Hz, 500w, EU Plug
EM5000/CE	5000ml	230v 50/ 60Hz, 800w
EM5000/CEX1	5000ml	115v 50/ 60Hz, 800w
EM5000/CEX6	5000ml	230v 50/ 60Hz, 800w, EU Plug

EMA Series Electromantle®

Technical information

Model	Capacity	Electrical Requirement
EMA0050/CEB	50ml	230v 50 Hz, 80w
EMA0050/CEBX1	50ml	115v 50/ 60Hz, 96w
EMA0050/CEBX6	50ml	230v 50/ 60hz, 80W EU Plug
EMA0100/CEB	100ml	230v 50/ 60Hz, 80w
EMA0100/CEBX1	100ml	115v 50/ 60Hz, 96w
EMA0100/CEBX6	100ml	230v 50/ 60hz, 80W EU Plug
EMA0250/CEB	250ml	230v 50/ 60Hz, 170w
EMA0250/CEBX1	250ml	115v 50/ 60Hz, 210w
EMA0250/CEBX6	250ml	230v 50/ 60Hz, 170w EU Plug
EMA0500/CEB	500ml	230v 50/ 60Hz, 220w
EMA0500/CEBX1	500ml	115v 50/ 60Hz, 270w
EMA0500/CEBX6	500ml	230v 50/ 60Hz, 220w EU Plug
EMA1000/CEB	1000ml	230v 50/ 60Hz, 320w
EMA1000/CEBX1	1000ml	115v 50/ 60Hz, 400w
EMA1000/CEBX6	1000ml	230v 50/ 60Hz, 320w EU Plug
EMA2000/CEB	2000ml	230v 50/ 60Hz, 520w
EMA2000/CEBX1	2000ml	115v 50/ 60Hz, 595w
EMA2000/CEBX6	2000ml	230v 50/ 60Hz, 520w, EU Plug



For more information, please visit: <http://www.electrothermal.com>

Technical information

Model	Capacity	Electrical Requirement
EMV0050/CE	10 to 50ml	230v 50/ 60Hz, 60w
EMV0050/CEX1	10 to 50ml	115v 50/ 60Hz, 75w
EMV0050/CEX6	10 to 50ml	230w 50/ 60Hz, 60w, EU Plug
EMV0250/CE	100 to 250ml	230v 50/ 60Hz, 150w
EMV0250/CEX1	100 to 250ml	115v 50/ 60Hz, 150w
EMV0250/CEX6	100 to 250ml	230v 50/ 60Hz, 150w, EU Plug
EMV1000/CE	500 to 1000ml	230v 50/ 60Hz, 300w
EMV1000/CEX1	500 to 1000ml	115v 50/ 60Hz, 300w
EMV1000/CEX6	500 to 1000ml	230v 50/ 60Hz, 300w, EU Plug
EMV5000/CE	2000 to 5000ml	230v 50/ 60Hz, 800w
EMV5000/CEX1	2000 to 5000ml	115v 50/ 60Hz, 800w
EMV5000/CEX6	2000 to 5000ml	230v 50/ 60Hz, 800w EU Plug

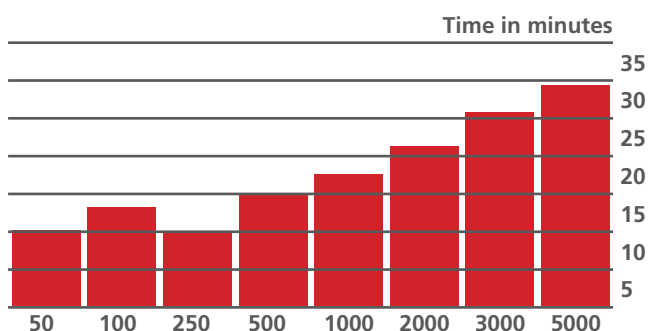
EMX Series Electromantle®

Technical information

Model	Capacity	Electrical Requirement
EMV0050/CE	10 to 50ml	230v 50/ 60Hz, 60w
EMV0050/CEX1	10 to 50ml	115v 50/ 60Hz, 75w
EMV0050/CEX6	10 to 50ml	230w 50/ 60Hz, 60w, EU Plug
EMV0250/CE	100 to 250ml	230v 50/ 60Hz, 150w
EMV0250/CEX1	100 to 250ml	115v 50/ 60Hz, 150w
EMV0250/CEX6	100 to 250ml	230v 50/ 60Hz, 150w, EU Plug
EMV1000/CE	500 to 1000ml	230v 50/ 60Hz, 300w
EMV1000/CEX1	500 to 1000ml	115v 50/ 60Hz, 300w
EMV1000/CEX6	500 to 1000ml	230v 50/ 60Hz, 300w, EU Plug
EMV5000/CE	2000 to 5000ml	230v 50/ 60Hz, 800w
EMV5000/CEX1	2000 to 5000ml	115v 50/ 60Hz, 800w
EMV5000/CEX6	2000 to 5000ml	230v 50/ 60Hz, 800w EU Plug

Boiling time

The bar graph illustrates the time required for a half filled flask of water to reach boiling point in each of the flask capacities. For all the boiling tests the ambient temperature was 17°C.



General specification

Maximum element temp:	450°C
Voltage:	115V or 230V AC
Wattage:	See table for nominal wattage of each flask capacity at rated voltage.
Indicator lights:	Clear for power. Amber for heater
Support Rod Clamp:	For 12.7mm (1/2") diameter support rods



For more information, please visit: <http://www.electrothermal.com/>

Also available in the Electrothermal range



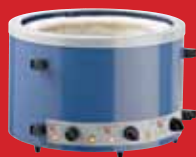
CMU Controlled Mantles

CMU heating mantles are used in wet chemistry to heat liquids in round bottom flasks. The metal case is designed to remain "cool-to-the-touch" when in operation. Electrothermal heating mantles have a grounded stainless steel earth screen covering the element and are double fused for added safety.



CMUA Stirring Mantles

CMUA models have all the features of the CMU range of heating mantles with the addition of variable speed stirring in single direction or auto reverse modes.



CMUV Large Capacity Heating Mantles

CMUV heating mantles accept a large range of flask and funnel sizes and are available with controlled and uncontrolled versions. Controlled mantles incorporate on board energy regulation. For uncontrolled mantles, a range of external controllers are available.



EME Extraction Heaters

The Electromantle extraction heaters are available with six or three recesses and feature a durable chemically resistant polypropylene top casing. All versions have built in electronic controllers and a wide range of flask sizes can be accommodated, with or without stirring.



Macro Kjeldahl

The Macro-Kjeldahl Extraction Heaters accept volume sizes from 80 to 800ml. Individual built-in controllers regulate quartz fibre heating elements up to 550°C to 800°C. These multibank units have a stainless steel housing that accepts an integral glassware support.



Micro Kjeldahl

The Micro-Kjeldahl Extraction Heaters accept volume sizes from 18 to 50ml. Individual built-in controllers regulate quartz fibre heating elements up to 550°C to 800°C. These multibank units have a stainless steel housing that accepts an integral glassware support.



Controllers

The Electrothermal Controllers line includes a range of models for single, double and triple place and percentage off/on. Controller line includes the ideal controller to pair with your heating mantles, mats and tapes.