Thermo Scientific Magnetic Stirrers

Reliable, safe performance for stirring applications

The ideal choice for your general lab needs
Thermo Scientific Stirrers Perform in Extraordinary Environments

- Stir Tiny Cuvettes
  Page 2

- Submersible in 95°C Bath
  Page 3

- Submersible in 50°C Bath
  Pages 5 and 7

- Used in General Purpose Incubator
  Pages 5 and 7

- Built-in Controller Convenience
  Page 6

- Stir 60 Positions Simultaneously
  Page 9

- Used in CO₂ Incubator
  Page 10

- Used in Sterilizers at 121°C 2 bar Pressure
  Page 11

- Stir 600 L Carboys
  Page 12
Renowned for their outstanding quality and durability, Thermo Scientific stirrers are available in a range of sizes, with drive systems to match the application or process need.

Powerful magnetic couplings ensure precise, reproducible stirring performance for both general and specialty applications.

Stirrers are available with convenient built-in controllers or with versatile external controllers. All offer safe, low voltage operation. Many models feature hermetically-sealed drive housings that allow operation in challenging laboratory environments and facilitate cleaning.

Units with adjustable power settings, allow users to adjust the power to the lowest level necessary to maintain the desired speed, resulting in an environmentally friendly solution that decreases power consumption and lowers heat output.

Reliable, No-Compromise Stirring Performance

Thermo Scientific magnetic stirrers are designed to provide excellent reliability, safety and performance.

Safe, Dependable Operation

Inductive-drive stirrers
Inductive-drive stirrers operate without moving parts.

- Hermetically-sealed drives for safe operation in demanding environments, easier cleaning and contamination prevention
- Single-point and multi-point stirring configurations

Heatless operation for valuable cell and tissue cultures
Stepper-drive stirrers offer heatless operation and slow mixing speeds to protect valuable cell and tissue cultures from damage.

- Sealed stainless steel housings for safe operation under high humidity conditions and impermeability to microorganisms
- Single-point and multi-point stirring configurations

Power for the largest volumes
Disc motor-drive stirrers provide the power to mix media volumes up to 600 L, or stir highly viscous liquids.

- Sealed stainless steel housings for safe operation under high humidity conditions
- Ideally suited for system integration with process equipment
Thermo Scientific Cimarec i Mini Stirrers

Mini stirrers are designed to work in the tiniest of places

- No larger than a thumbnail, ideal for stirring cuvettes
- Stir speeds up to 1400 rpm
- Stir volumes up to 5 mL
- Choose from two different control units (your choice included)

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini w/ Telemodul</td>
<td>50088130</td>
<td>230 V Euro</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
<td>0.1</td>
<td>12 x 12 x 5</td>
<td>0.02</td>
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<td>Mini w/ Telemodul</td>
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<td>Mini w/ Telemodul</td>
<td>50088126</td>
<td>100 V Japan</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
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<td>12 x 12 x 5</td>
<td>0.02</td>
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<tr>
<td>Mini w/ Telemodul 20 C</td>
<td>50088120</td>
<td>100-240 V</td>
<td>130-1400</td>
<td>IP68 (stirrer only)</td>
<td>0.5/0.1/0.15/0.2</td>
<td>12 x 12 x 5</td>
<td>0.02</td>
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</table>

Operating conditions are -10 to +56°C at 95% rH
100-240 V units contain a cord set with various plugs

Optional Accessories
- Mini stirrer without controller 50088140
- 4-place distributor 50091720
- 8-place distributor 50091721

Controller Choices

The Cimarec i Micro and Mini series stirrers come standard with your choice of controller. Choose the standard Telemodul controller with its space saving design or the Telemodul 20 C with microprocessor controls, adjustable power setting and programmability. Detailed specifications can be found on page 9.
Thermo Scientific Cimarec i Micro Stirrers

Hermetically sealed IP68 protection class stirrers can be submerged in water

- Hermetically sealed housing resists dust and microorganisms
- Suitable for use in high humidity conditions, and can be fully submerged in water baths up to 95°C
- Up to eight stirrers can be controlled with a single controller
- Stainless steel housing has excellent chemical resistance
- Stir speeds up to 1400 rpm
- Stir volumes up to 1 L
- Choose from two different control units (your choice included)

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
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</thead>
<tbody>
<tr>
<td>Micro w/ Telemodule</td>
<td>50088162</td>
<td>230 V Euro</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
<td>3</td>
<td>48 x 48 x 15</td>
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<tr>
<td>Micro w/ Telemodule</td>
<td>50088151</td>
<td>230 V UK</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
<td>3</td>
<td>48 x 48 x 15</td>
<td>0.2</td>
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<tr>
<td>Micro w/ Telemodule</td>
<td>50088155</td>
<td>230 V Australia</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
<td>3</td>
<td>48 x 48 x 15</td>
<td>0.2</td>
</tr>
<tr>
<td>Micro w/ Telemodule</td>
<td>50088150</td>
<td>115 V USA</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
<td>3</td>
<td>48 x 48 x 15</td>
<td>0.2</td>
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<tr>
<td>Micro w/ Telemodule</td>
<td>50088149</td>
<td>100 V Japan</td>
<td>130-1000</td>
<td>IP68 (stirrer only)</td>
<td>3</td>
<td>48 x 48 x 15</td>
<td>0.2</td>
</tr>
<tr>
<td>Micro w/ Telemodule 20 C</td>
<td>50088148</td>
<td>100-240 V</td>
<td>130-1400</td>
<td>IP68 (stirrer only)</td>
<td>2/4/6/8</td>
<td>48 x 48 x 15</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to 120°C at 95% rH or 0-95°C submerged in water 100-240 V units contain a cord set with various plugs

Optional Accessories
- Micro stirrer without controller 50134760
- 4-place distributor 50091720
- 8-place distributor 50091721

See page 8.
Thermo Scientific Cimarec i Mono Direct and Maxi Direct Stirrers

Space saving, general purpose stirrers that are designed to resist wear

With powerful magnets and no moving parts, these inductive-drive stirrers are the perfect choice for your general lab needs.

- Large, flat, easy to clean work surfaces
- Compact space saving design
- Gradual start acceleration is gentle and ensures optimum magnetic coupling
- Adjustable power settings are separate from the speed control
  - Decreases power consumption
  - Lowers heat output

Cimarec i Mono Direct Stirrer

- Easy-to-use rotary knob design
- Rugged powder coated stainless steel housing
- Stir speeds up to 1000 rpm
- Stir volumes up to 3 L

Cimarec i Maxi Direct Digital Stirrer

- IP64 protection rated; easily cleaned with running water
- Precise microprocessor control with bright digital display
- Easy to clean, chemical resistant, sealed stainless steel housing
- Easily recall last used settings
- Smooth and even stirring as low as 80 rpm
- Stir speeds up to 2000 rpm
- Stirring volumes up to 5 L

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
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</thead>
<tbody>
<tr>
<td>Mono Direct</td>
<td>50094711</td>
<td>230 V Euro</td>
<td>130-1200</td>
<td>IP32</td>
<td>1/5</td>
<td>180 x 215 x 35</td>
<td>1.4</td>
</tr>
<tr>
<td>Mono Direct</td>
<td>50096203</td>
<td>230 V UK</td>
<td>130-1200</td>
<td>IP32</td>
<td>1/5</td>
<td>180 x 215 x 35</td>
<td>1.4</td>
</tr>
<tr>
<td>Mono Direct</td>
<td>50097289</td>
<td>230 V Australia</td>
<td>130-1200</td>
<td>IP32</td>
<td>1/5</td>
<td>180 x 215 x 35</td>
<td>1.4</td>
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<tr>
<td>Mono Direct</td>
<td>50095601</td>
<td>115 V USA</td>
<td>130-1200</td>
<td>IP32</td>
<td>1/5</td>
<td>180 x 215 x 35</td>
<td>1.4</td>
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<tr>
<td>Mono Direct</td>
<td>50095921</td>
<td>100 V Japan</td>
<td>130-1200</td>
<td>IP32</td>
<td>1/5</td>
<td>180 x 215 x 35</td>
<td>1.4</td>
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<tr>
<td>Maxi Direct</td>
<td>50094713</td>
<td>100-240 V</td>
<td>80-2000</td>
<td>IP64</td>
<td>5/10/15/20</td>
<td>180 x 215 x 35</td>
<td>2.5</td>
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</tbody>
</table>

Operating conditions are -10 to +40°C at 95% rH
100-240 V units contain a cord set with various plugs
Thermo Scientific Cimarec i Compact and Maxi Stirrers
Hermetically sealed units designed for challenging stirring environments

With powerful magnets and no moving parts, these inductive-drive stirrers are designed to go into water baths and incubators.

- Outstanding mechanical, physical, thermal and chemical resistance
- Large, flat, easy to clean work surfaces
- Hermetically sealed housing resists dust and micro-organisms
- Easy to clean, chemical resistant stainless steel housing
- All models submersible for use in water baths up to 50°C
- Choose from three different control units (your choice included)

Cimarec i Maxi Stirrer with External Control
- IP68 protection rated
- Stir speeds up to 2000 rpm
- Stir volumes up to 5 L
- Available with Telemodul 40 C for data transfer and PC control
- Adjustable power settings available on the Telemodul 20 C and Telemodul 40 C
  - Decreases power consumption
  - Lowers heat output

Cimarec i Compact Stirrer with External Control
- IP68 protection rated
- Stir speeds up to 1400 rpm
- Stirring volumes up to 1.5 L
- Adjustable power settings available on the Telemodul 20 C
  - Decreases power consumption
  - Lowers heat output

Optional Accessories
- Compact stirrer without controller 50134759
- Maxi stirrer without controllers 50134758
- 4-place distributor 50091720
- 8-place distributor 50091721

Controller Choices
The Cimarec i Maxi and Compact series stirrers come standard with your choice of controller. Choose the standard Telemodul controller with its space saving design, the Telemodul 20 C with microprocessor controls, adjustable power setting and programmability or the Telemodul 40 C with higher speeds, more power settings and PC control. Detailed specifications can be found on page 9.
These Cimarec i inductive drive stirrers offer our renowned features in a fully synchronized multipoint platform.

- Ideal for mass screening applications and other applications requiring multiple stirring points
- Large, flat, easy to clean work surfaces
- Gradual start acceleration is gentle and ensures good magnetic coupling
- Inductive-drive ensures completely synchronized stirring at all positions

### Thermo Scientific Cimarec i Poly 15 and Multipoint Stirrers
Available in platforms with up to 15 positions

#### Cimarec i Poly 15 Multipoint Stirrer
- Precise microprocessor control with bright digital display
- Easily recall last used settings
- Rugged powder coated stainless steel housing
- Stir speeds up to 990 rpm
- Suitable for 15 x 250 mL beakers or 6 x 1 L flasks

#### Cimarec i Advanced Multipoint 6/15 Stirrer
- P64 protection rated; easily cleaned with running water
- Precise microprocessor control with bright digital display
- Easy to clean, chemical resistant, sealed stainless steel housing
- Easily recall last used settings
- Adjustable power settings are separate from the speed control
  - Decreases power consumption
  - Lowers heat output
- Smooth and even stirring as low as 80 rpm
- Stir speeds up to 2000 rpm
- Stirring volumes up to 3 L per multipoint

<table>
<thead>
<tr>
<th>Model</th>
<th>Stir Positions</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
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</thead>
<tbody>
<tr>
<td>Poly 15</td>
<td>15</td>
<td>50094596</td>
<td>100-240 V</td>
<td>130-990</td>
<td>IP32</td>
<td>10</td>
<td>240 x 420 x 35</td>
<td>6</td>
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<tr>
<td>Multipoint 6</td>
<td>6</td>
<td>50093557</td>
<td>100-240 V</td>
<td>80-2000</td>
<td>IP64</td>
<td>5/10/15/20</td>
<td>240 x 420 x 35</td>
<td>7.5</td>
</tr>
<tr>
<td>Multipoint 15</td>
<td>15</td>
<td>50093538</td>
<td>100-240 V</td>
<td>80-2000</td>
<td>IP64</td>
<td>5/10/15/20</td>
<td>240 x 420 x 35</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to +40°C at 95% rH
100-240 V units contain a cord set with various plugs
Thermo Scientific Cimarec i Telesystems

Designed for use with aggressive media, in high humidity environments, our Telesystems are perfect for integration with incubators and controlled climate chambers

- Low maintenance designed to resist wear
- All models submersible for use in water baths up to 50°C
- Inductive-drive ensures completely synchronized stirring at all positions
- Choose from 6, 15 or 60 position stirrers
- Choose from two external controllers with adjustable power settings (your choice included)
  - Decreases power consumption
  - Lowers heat output
- Available with Telemodul 40 C for data transfer and PC control

Telesystem Multipoint Stirrer with External Control

- IP68 protection rated; easily cleaned with running water
- Chemical resistant, sealed stainless steel housing
- Easily recall last used settings
- Adjustable power settings are separate from the speed control
  - Decreases power consumption
  - Lowers heat output

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
<th>Stir Volume per point (ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telesystem 6 Position</td>
<td>50088077</td>
<td>100-240 V</td>
<td>130-1400</td>
<td>IP68</td>
<td>5/10/15/20</td>
<td>240 x 420 x 35</td>
<td>7.5</td>
<td>1-1500</td>
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<tr>
<td>w/ Telemodul 20 C</td>
<td></td>
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<td>Telesystem 6 Position</td>
<td>50088078</td>
<td>100-240 V</td>
<td>100-2000</td>
<td>IP68</td>
<td>4-40</td>
<td>240 x 420 x 35</td>
<td>8</td>
<td>1-2000</td>
</tr>
<tr>
<td>w/ Telemodul 40 C</td>
<td></td>
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<tr>
<td>Telesystem 15 Position</td>
<td>50088034</td>
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<td>130-1400</td>
<td>IP68</td>
<td>5/10/15/20</td>
<td>240 x 420 x 35</td>
<td>7.5</td>
<td>1-1000</td>
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<tr>
<td>w/ Telemodul 20 C</td>
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<td></td>
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<td></td>
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<td>Telesystem 15 Position</td>
<td>50088036</td>
<td>100-240 V</td>
<td>100-2000</td>
<td>IP68</td>
<td>4-40</td>
<td>240 x 420 x 35</td>
<td>8</td>
<td>1-1200</td>
</tr>
<tr>
<td>w/ Telemodul 40 C</td>
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</tr>
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<td>Telesystem 60 Position</td>
<td>50088009</td>
<td>100-240 V</td>
<td>130-1400</td>
<td>IP68</td>
<td>5/10/15/20</td>
<td>240 x 420 x 35</td>
<td>7.5</td>
<td>0.1-50</td>
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<tr>
<td>w/ Telemodul 20 C</td>
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<tr>
<td>Telesystem 60 Position</td>
<td>50088011</td>
<td>100-240 V</td>
<td>100-2000</td>
<td>IP68</td>
<td>4-40</td>
<td>240 x 420 x 35</td>
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<td>0.1-100</td>
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<td>w/ Telemodul 40 C</td>
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<td></td>
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</table>

Operating conditions are -10 to 56°C at 100% rH in air; 0-50°C submerged in water
100-240 V units contain a cord set with various plugs

Controller Choices

The Telesystem multipoint stirrers come standard with your choice of controller. Choose the Telemodul 20 C with microprocessor controls, adjustable power setting, and programmability or the Telemodul 40 C with higher speeds, more power settings, and PC control. Detailed specifications can be found on page 9.
Thermo Scientific Cimarec i
Distributors, Mounts, Racks,
Thermostats and Extension Cables

For Mini, Micro, Compact and Maxi Series Stirrers

Benchtop Distributors (Link & Sync)
Benchtop distributors ensure identical operating conditions for multiple stirrer installations.

- Simultaneous control of 2, 4, 6 or 8 Mini, Micro or Compact series stirrers using a single Telemodul 20 C or Telemodul 40 C external controller
- Simultaneous control of 2 or 4 Maxi series stirrers using a single Telemodul 20 C or Telemodul 40 C external controller
- Even power distribution for synchronized stirring

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>4-Place Distributor</td>
<td>50091720</td>
</tr>
<tr>
<td>8-Place Distributor</td>
<td>50091721</td>
</tr>
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</table>

For Telesystem Series Stirrers

Bath Mounts

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Bath Volume (L)</th>
<th>Operating Temp. (°C)</th>
<th>Dimensions WxDxH (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparent Acrylic Bath Mount</td>
<td>50087880</td>
<td>15</td>
<td>0 to +60</td>
<td>330 x 610 x 185</td>
</tr>
<tr>
<td>Stainless Steel Bath Mount</td>
<td>50087882</td>
<td>15</td>
<td>-10 to +200</td>
<td>315 x 520 x 160</td>
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</tbody>
</table>

Test Tube Racks
Stainless steel test tube racks ensure that test tubes are precisely centered over stirring points.

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rack for 20 mm Ø Tubes</td>
<td>50087957</td>
</tr>
<tr>
<td>Rack for 16 mm Ø Tubes</td>
<td>50087960</td>
</tr>
</tbody>
</table>

Thermostats
Our thermostats are equipped with a circulation pump and digital temperature display.

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermostat 60°C, 230 V</td>
<td>50087884</td>
</tr>
<tr>
<td>Thermostat 95°C, 230 V</td>
<td>50087875</td>
</tr>
<tr>
<td>Thermostat 60°C, 115 V</td>
<td>50087876</td>
</tr>
<tr>
<td>Thermostat 95°C, 115 V</td>
<td>50087867</td>
</tr>
</tbody>
</table>

Extension Cables

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Dimensions L (m)</th>
<th>Controller Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-Pin Extension Cable</td>
<td>50088016</td>
<td>3</td>
<td>Telemodul 20 C, 40 C &amp; 10 M</td>
</tr>
<tr>
<td>6-Pin Extension Cable</td>
<td>50088021</td>
<td>3</td>
<td>Biomodul 40 B</td>
</tr>
<tr>
<td>8-Pin Extension Cable</td>
<td>50088102</td>
<td>3</td>
<td>Telemodul 40 M &amp; 80 M</td>
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</table>
Standard Telemodul

The space-saving Telemodul controller provides stirring power for small to medium volumes of low-viscosity fluids. Recommended for single point stirring up to 250 mL.

Telemodul 20 C

The versatile Telemodul 20 C controller features user-friendly, menu-driven microprocessor controls.

- Single handed operation with straightforward turn and press adjustment wheel
- Three individual program store and recall keys for rapid start up
- Last used settings stored in memory
- Rocking/shake mode reverses stir bar direction for a gentle back and forth stirring motion
- Four power settings to decrease power consumption and lower heat output

Telemodul 40 C

The Telemodul 40 C controller offers all the functionality of the Telemodul 20 C controller. Additional features include:

- Power output booster to 40 W for more demanding stirring tasks
- 10 power settings to decrease power consumption and lower heat output
- RS-232 interface for data transfer and PC control

Telemodul External Control Units

<table>
<thead>
<tr>
<th>Description</th>
<th>Telemodul</th>
<th>Telemodul 20 C</th>
<th>Telemodul 40 C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed Control Range (rpm)</td>
<td>130-1000</td>
<td>130-1400</td>
<td>100-2000</td>
</tr>
<tr>
<td>Speed Control Accuracy (%)</td>
<td>±3</td>
<td>±1</td>
<td>±1</td>
</tr>
<tr>
<td>Rated Power (W)</td>
<td>7</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Stirring Power Relative to Rated Power (%)</td>
<td>100</td>
<td>25/50/75/100 (4 Levels)</td>
<td>10-100 (10 Levels)</td>
</tr>
<tr>
<td>Starting Times</td>
<td>–</td>
<td>5 s to 60 min</td>
<td>5 s to 60 min</td>
</tr>
<tr>
<td>Pause Times</td>
<td>–</td>
<td>5 s to 60 min</td>
<td>5 s to 60 min</td>
</tr>
<tr>
<td>Starting Times</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Output Voltage (VDC)</td>
<td>12</td>
<td>20</td>
<td>36</td>
</tr>
<tr>
<td>Supply Voltage (VAC)</td>
<td>115 or 230</td>
<td>100-240</td>
<td>100-240</td>
</tr>
<tr>
<td>Ambient Temperature Range (°C)</td>
<td>0 to +40 @ 80% rH</td>
<td>0 to +40 @ 80% rH</td>
<td>0 to +40 @ 80% rH</td>
</tr>
<tr>
<td>Dimensions WxDxH (mm)</td>
<td>63 x 96 x 50</td>
<td>155 x 165 x 95</td>
<td>155 x 165 x 95</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>0.4</td>
<td>0.6</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Thermo Scientific Cimarec Biosystem Stirrers for Cell Culture

Gentle stirring and low heat output protect sensitive cell cultures. Stir microcarrier cultures, culture broths and cell suspensions inside your CO₂ incubator.

- Hermetical sealed housing resists microorganisms
  - Separate external controller ensures that only the hermetically sealed stirrer is exposed to the CO₂ environment
- Heatless operation
  - Protects thermal sensitive cell culture
  - Will not compromise the incubator chamber conditions
- Stainless steel housing is easy to clean, and resists aggressive media
- Gradual low-shear acceleration on start up
- Controller has adjustable power settings
  - Decreases power consumption
  - Lowers heat output
- Smooth and even stirring as low as 5 rpm
- Single position stirrers have the power to stir up to 20 L
- Four-position stirrers can stir up to 5 L per position

Required: Biomodul 40 B control unit

Controller has high visibility display, adjustable stirring and pause times with rotation sense inversion. Enables synchronized operation of two Biosystem stirrers.

- 50118915 – 230 V Germany
- 50118918 – 230 V UK
- 50118921 – 230 V China
- 50118916 – 230 V Italy
- 50118919 – 230 V Switzerland
- 50126086 – 115 V US
- 50118917 – 230 V Denmark
- 50118920 – 230 V Australia

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosystem w/o Controller</td>
<td>50119113</td>
<td>n/a</td>
<td>5-120</td>
<td>IP68</td>
<td>0.4-4</td>
<td>180 x 180 x 60</td>
<td>3.4</td>
</tr>
<tr>
<td>Biosystem 4 Position w/o Controller</td>
<td>50119114</td>
<td>n/a</td>
<td>5-120</td>
<td>IP68</td>
<td>0.4-4</td>
<td>330 x 330 x 60</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to +56°C at 100% rH

Thermo Scientific Cimarec Biosystem Direct Stirrers for Cell Culture

- Can be used for gentle stirring outside of a CO₂ incubator
- Built-in controller
- Heatless operation
  - Protects heat sensitive cell culture
- Stainless steel housing is easy to clean, and resists aggressive media
- Gradual low-shear acceleration on start up
- Smooth and even stirring as low as 5 rpm
- Single position stirrers can stir up to 5 L
- Four-position stirrers can stir up to 2 L per position

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cimarec Biosystem Direct</td>
<td>50088071</td>
<td>230 V Euro</td>
<td>5-120</td>
<td>IP64</td>
<td>1</td>
<td>180 x 180 x 60</td>
<td>3.4</td>
</tr>
<tr>
<td>Cimarec Biosystem Direct</td>
<td>50088057</td>
<td>230 V UK</td>
<td>5-120</td>
<td>IP64</td>
<td>1</td>
<td>180 x 180 x 60</td>
<td>3.4</td>
</tr>
<tr>
<td>Cimarec Biosystem Direct</td>
<td>50088064</td>
<td>230 V Australia</td>
<td>5-120</td>
<td>IP64</td>
<td>1</td>
<td>180 x 180 x 60</td>
<td>3.4</td>
</tr>
<tr>
<td>Cimarec Biosystem Direct</td>
<td>50088058</td>
<td>115 V USA</td>
<td>5-120</td>
<td>IP64</td>
<td>1</td>
<td>180 x 180 x 60</td>
<td>3.4</td>
</tr>
<tr>
<td>Cimarec Biosystem Direct</td>
<td>50101524</td>
<td>100 V Japan</td>
<td>5-120</td>
<td>IP64</td>
<td>1</td>
<td>180 x 180 x 60</td>
<td>3.4</td>
</tr>
<tr>
<td>Cimarec Biosystem 4 Direct</td>
<td>50088061</td>
<td>100-240 V</td>
<td>5-120</td>
<td>IP64</td>
<td>0.05 (x4)</td>
<td>330 x 330 x 60</td>
<td>11</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to +40°C at 95% rH

100-240 V units contain a cord set with various plugs
Thermo Scientific Cimarec Mobil 10 and Mobil 25 Large Volume Stirrers

The power to stir up to 10 L and mix viscous liquids

• “Quick Stop” function stops the drive within two seconds minimizing after runs and reducing the risk of vessel breakage

Required: Telemodul 10 M controller
• 500119120 – 230 V
• 500119121 – 115 V US

Cimarec Mobil 10 Stirrers
• Compact space saving design
• Gradual low-shear acceleration on start up
• Stir speeds from 100-1000 rpm

Cimarec Mobil 25 Stirrers
• Ideal for high temperatures up to 121°C and high pressure applications up to 2 bars (29 psi)
• Can be used in autoclaves, water baths and climatic chambers
• Perfect for use on sterilized media ensuring even heating and cooling
• IP68 protection rated; easily cleaned with running water
• Easy to clean, chemical resistant, sealed stainless steel housing
• Gradual low-shear acceleration on start up
• Stir speeds from 100-1000 rpm

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions ØxH (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobil 10 w/o Controller</td>
<td>50119111</td>
<td>n/a</td>
<td>100-1000</td>
<td>IP66</td>
<td>10</td>
<td>128 x 32</td>
<td>0.7</td>
</tr>
<tr>
<td>Mobil 25 w/o Controller</td>
<td>50119112</td>
<td>n/a</td>
<td>100-1000</td>
<td>IP68</td>
<td>10</td>
<td>128 x 32</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Operating conditions of Mobil 10 are -10 to 56°C
Operating conditions of Mobil 25 are -10 to 121°C

Cimarec Power Direct

High capacity stirring of up to 40 L with its own integrated controller

• “Quick Stop” function stops the drive within two seconds minimizing after runs and reducing the risk of vessel breakage
• IP22 protection rated; easily cleaned with running water
• Sealed stainless steel housing is easy to clean and chemical resistant
• Integrated controller has adjustable power setting
  – Decreases power consumption
  – Lowers heat output
• Stir speeds from 100-2000 rpm

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Direct</td>
<td>50098760</td>
<td>100-240 V</td>
<td>100-2000</td>
<td>IP22</td>
<td>5/10/15/20</td>
<td>240 x 295 x 35</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to 40°C
100-240 V units contain a cord set with various plugs
Thermo Scientific Cimarec Mobil Direct, Mobil 200 and Mobil 600 Large Volume Stirrers
Excellent stirring power for high volume applications

- For use in pilot plant or integrated with process equipment
- “Quick Stop” function stops the drive within three seconds minimizing after runs and risk of vessel breakage
- IP64/65 protection rated; easily cleaned with running water
- Easy to clean, chemical resistant, sealed stainless steel housing
- Stir speeds from 100-1000 rpm
- Mobil direct can stir up to 150 L and features an integrated controller with adjustable power settings
- Mobil 200 can stir up to 200 L
- Mobil 600 can stir up to 600 L
- The maximum shaft torque is 30 Ncm for the Mobil Direct and 50 Ncm for the Mobil 200 and Mobil 600
- Mobil 200 and Mobil 600 require either the Telmodul 40 M or the Telemodul 80 M control unit

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobil Direct</td>
<td>50088128</td>
<td>230 V Euro</td>
<td>100-1000</td>
<td>IP64</td>
<td>40</td>
<td>330 x 330 x 80</td>
<td>16</td>
</tr>
<tr>
<td>Mobil Direct</td>
<td>50088131</td>
<td>115 V USA</td>
<td>100-1000</td>
<td>IP64</td>
<td>40</td>
<td>330 x 330 x 80</td>
<td>16</td>
</tr>
<tr>
<td>Mobil Direct</td>
<td>50088129</td>
<td>100 V Japan</td>
<td>100-1000</td>
<td>IP64</td>
<td>40</td>
<td>330 x 330 x 80</td>
<td>16</td>
</tr>
<tr>
<td>Mobil Direct</td>
<td>50100547</td>
<td>230 V UK</td>
<td>100-1000</td>
<td>IP64</td>
<td>40</td>
<td>330 x 330 x 80</td>
<td>16</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to +40°C at 95% rH

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Voltage/Plug Type</th>
<th>Speed (rpm)</th>
<th>Protection Class</th>
<th>Power Settings (W)</th>
<th>Dimensions WxDxH (mm)</th>
<th>Weight (kg)</th>
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</thead>
<tbody>
<tr>
<td>Mobil 200 w/o Controller</td>
<td>50119109</td>
<td>n/a</td>
<td>100-1000</td>
<td>IP65</td>
<td>80</td>
<td>180 x 180 x 80</td>
<td>6</td>
</tr>
<tr>
<td>Mobil 600 w/o Controller</td>
<td>50119110</td>
<td>n/a</td>
<td>100-1000</td>
<td>IP65</td>
<td>80</td>
<td>330 x 330 x 80</td>
<td>16</td>
</tr>
</tbody>
</table>

Operating conditions are -10 to +56°C at 100% rH
Telemodul 40 M

The powerful Telemodul 40 M controller equips Mobil 200 and Mobil 600 stirrers for the most demanding mixing tasks.

- Adjustable speeds from 100 to 1000 rpm
- Constant speeds, even during viscosity changes
- High-visibility digital display
- Adjustable start-up times
- Thermal and electrical overload protection, with fault alert

Telemodul 80 M

The Telemodul 80 M controller offers all the functionality of the Telemodul 40 M, with power output boosted to 80 Watts for more demanding stirring tasks.

- Adjustable speeds from 100 to 1000 rpm
- Constant speeds, even during viscosity changes
- High-visibility digital display
- Adjustable start-up times
- Thermal and electrical overload protection, with fault alert
Thermo Scientific Komet

Super-Strong Magnetic Stirring Bars

- High energy Samarium-Cobalt (SmCo) magnetic core
- Excellent mixing action at high speeds, and with viscous media
- Evenly coated PTFE surface prevents residue deposits
- Steam sterilizable to 121°C
- Long-life stirring bars with wear-resistant glide ring
- Enhanced stirrer performance and applications versatility

- Uniquely powerful
- Available in four different sizes
- Highest wear-resistance

<table>
<thead>
<tr>
<th>Model</th>
<th>Part Number</th>
<th>Shape</th>
<th>Diameter (mm)</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Komet 90, 1 Pack</td>
<td>50087902</td>
<td>round</td>
<td>25</td>
<td>90</td>
</tr>
<tr>
<td>Komet 50, 1 Pack</td>
<td>50087909</td>
<td>round</td>
<td>21</td>
<td>50</td>
</tr>
<tr>
<td>Komet 30, 1 Pack</td>
<td>50087930</td>
<td>round</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>Komet 15, 1 Pack</td>
<td>50087924</td>
<td>round</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Komet Glide-Ring 90, 1 Pack</td>
<td>50093336</td>
<td>round w/ glide ring</td>
<td>31</td>
<td>90</td>
</tr>
<tr>
<td>Komet Glide-Ring 50, 1 Pack</td>
<td>50093335</td>
<td>round w/ glide ring</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Komet Glide-Ring 30, 1 Pack</td>
<td>50093334</td>
<td>round w/ glide ring</td>
<td>17</td>
<td>30</td>
</tr>
</tbody>
</table>