Blood Management Solutions

SAVING LIVES THROUGH RELIABLE AND INNOVATIVE TECHNOLOGY

Blood Management Solutions
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Saving lives through reliable and innovative technology

UNDERSTANDING THE NEEDS OF MEDICAL PROFESSIONALS REQUIRES A CONSTANT DIALOGUE.

The medical challenges our partners and clients face on the ground can be overwhelming. By continuously engaging with them and gathering insights through dialogue and exchange, we are able to understand their evolving needs. As a key global player in the sector of medical technology, B Medical Systems is committed to delivering highly specialized and cutting-edge devices that always exceed expectations.

DESIGNING RELIABLE MEDICAL DEVICES IS AT THE HEART OF OUR INNOVATION PROCESS.

We feel deeply connected to the international community of healthcare professionals and use optimized industrial processes to offer reliable products and services that help develop a relationship of trust. By managing the design, manufacturing, distribution and after-sales elements, we adopt a lifecycle approach and can ensure the Total Cost of Ownership of our products is as low as possible.

PUTTING PEOPLE FIRST STARTS WITHIN OUR ORGANIZATION.

We take a customer-oriented approach in everything we do, and are guided by our values and high standards. Our team of highly skilled professionals share our desire to excel and stay ahead of the game in the field of technological innovation. As an organization, our core aim is to save lives through reliable and innovative technology.

SAFE GLOBAL BLOOD MANAGEMENT: FROM COLLECTION TO TRANSFUSION, TRANSPORTATION, PROCESSING AND STORAGE.

B Medical Systems is a renowned expert in blood safety and management. Our reliable blood cold chain strictly observes international standards and World Health Organization recommended specifications. We keep blood safe through temperature-controlled transportation, processing and storage solutions. Additionally B Medical Systems offers innovative solutions for blood and derivatives treatment. These include a new Contact Shock Freezer that delivers optimized performance with its innovative system (patent pending) – it enables faster and more homogenous freezing that saves time and money – and an exclusive integrated Incubator and Platelet Agitator with autonomous motioned trays, each with their own door, which ensures better stability and preservation of product quality, and consequently production gains.

SUMMARY

04-05 B Medical Systems Safety Standards
For technical reliability and environmental friendliness

06 European Medical Device Directive 93/42/EEC
For increased reliability to comply with European essential requirements

07 Blood Traceability
RFID technology for a complete traceability and identification of RBCC

08-18 Blood Management Chain
A selected range of products for an uninterrupted and precise temperature controlled blood cold chain

19 "B Connected & DCU
For optimum control and protection of your preparations
A complete line for a reliable blood management chain

Blood Management Solutions

Platelet Agitators
PA RANGE

Storage capacity (100ml bags)
- PA 31: 30
- PA 41: 40
- PA 51: 50
- PA 61: 60
- PA 71: 70
- PA 81: 80
- PA 91: 90
- PA 101: 100
- PA 111: 110
- PA 121: 120
- PA 131: 130
- PA 141: 140

Contact Shock Freezers
CSF RANGE

Freezing capacity (plasma bags)
- CSF 61: 20 (1000mL) / 40 (350mL)
- CSF 101: 30 (1000mL) / 60 (350mL)

Plasma Storage Freezers
F RANGE (DIN 58375)

Storage capacity (plasma bags)
- F 131: 69 (350mL)
- F 291: 231 (350mL)
- F 381: 345 (350mL)
- F 401: 460 (350mL)
- F 501: 575 (350mL)
- F 701: 690 (350mL)
- F 901: pending

Distribution Freezers
U RANGE

Storage capacity (blood bags)
- U 401: 24 (450mL) / 32 (350mL)
- U 501: 51 (450mL) / 69 (350mL)
- U 701: 171 (450mL) / 231 (350mL)
- U 901: pending

Transport Systems
MT RANGE (ADR / RID / IMDG / ICAO-TI / IATA-DGR)

Storage capacity (bags)
- MT 2: 1 (450mL) / 2 (270mL)
- MT 4: 4 (100mL) / 6 (125mL)
- MT 6: 6 (100mL) / 9 (72mL)
- MT 12: 12 (100mL) / 18 (37mL)
- MT 25: 25 (100mL) / 20 (25mL)
- MT 100: 40 (100mL)

Gross / Net volume (l)
- MT 2: 2.2 / 1.7
- MT 4: 8 / 3.8
- MT 6: 12 / 6.2
- MT 12: 20 / 10.8
- MT 25: 24 / 12
- MT 100: 45 / 22

Cooling system
- Passive
- Active (Compressor)
The Safety Standards developed by B Medical Systems define certain significant technical features of a product. These ensure the safe storage of the preparations as well as setting the highest standards of safety for the user.

<table>
<thead>
<tr>
<th>PRECISION LINE</th>
<th>PREMIUM LINE</th>
<th>PA RANGE</th>
<th>CSF RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>B Medical Systems Electronics</td>
<td>B Medical Systems digital display</td>
<td>B Medical Systems 4,3” digital color display with capacitive buttons</td>
<td>B Medical Systems 4,3” digital color display with capacitive buttons</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Safety door lock (with 2 keys) and key-operated power switch ON/OFF (with 2 keys)</td>
<td>Power indicator light and digital temperature indicator (display: 0.1 digits)</td>
<td>Controlled fan cooling system for constant temperature and even temperature distribution across the entire refrigerating chamber (not applicable for F/U ranges)</td>
<td>Automatic switch-off when front door opens (not applicable for U range)</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Self-contained alarm system with integrated battery takes over the alarm function and temperature value measurements in case of power failure for at least 48 hours</td>
<td>Built-in rechargeable battery backup provides continuous movements and air circulation, in case of power failure</td>
<td>Acoustic and visual alarm signal in case of temperature alarm and power failure</td>
<td>The alarm history function on the electronic stores all the relevant values during a temperature alarm, such as: min., max. and average temperature &amp; also the duration of the alarm</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Remote transmission alarm signal (via potential-free contact) in case of temperature alarm (change-over contact)</td>
<td>Safety thermostat prevents dropping of the temperature below +2°C (only for B range)</td>
<td>Door opening alarm (visual / acoustic)</td>
<td>Designed and tested for climatic class SN (ambient temperature range +10°C to +32°C)</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Designed and tested for climatic class SN (ambient temperature range +10°C to +32°C)</td>
<td>Designed and tested for climatic class N (ambient temperature range +16°C to +32°C)</td>
<td>Designed and tested for climatic class SN / T (ambient temperature range +10°C to +43°C) (only for B range)</td>
<td>Designed and tested for climatic class SN / T (ambient temperature range +10°C to +43°C) (only for B range)</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Ethernet interface for the visualization of all operating and control functions (hardware and software settings) via °B Connected monitoring software on a peripheral device (computer)</td>
<td>Interior made from stainless steel [Evaporator plates and drip channel made from stainless steel for CSF range]</td>
<td>Internal LED lighting (not applicable for F/U ranges)</td>
<td>Additional remote transmission alarm signal (via potential-free contact) in case of power failure (change-over contact)</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Smooth castors for optimum flexibility of movement</td>
<td>External water cooling (not applicable for B range)</td>
<td>Ambient temperature sensor</td>
<td>°B Connected - Universal software for the monitoring of refrigeration devices, including the acquisition, recording and visualization of temperature data</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>
| °B Connected - Universal software for the monitoring of refrigeration devices, including the acquisition, recording and visualization of temperature data | DCU (Data Communication Unit) - Hardware module monitoring all operating conditions and passing them through to a central database – via local network | Subject to change without prior notice.
NEW

SAVING LIVES THROUGH RELIABLE AND INNOVATIVE TECHNOLOGY

PRECISION LINE | MODELS B 51-131-291-381 & F 131-291-381

1 Integrated multi-function electronics
Integrated B Medical Systems multi-function electronics, at easy access level, in the door handle; compatible with a "B Connected monitored solution.

2 Lifetime warranty corrosion-free cabinet
- One piece material cabinet with a lifetime warranty for zero corrosion, highest quality polypropylene for a better insulation and no sharp edges to provide easier maintenance and cleaning
- Easier, safer handling as the lower weight of corrosion free material offers better stability with heavier components placed at the bottom

USERFRIENDLY AND LONGER LIFETIME

PREMIUM LINE | MODELS B/F/U 401-501-701-901

1 Exclusive innovative handle bar (patent pending)
All functionalities at easy reach:
- Open/close - Heavy duty door lock mechanism
- Digital control with full functionalities - Standard multifunction digital sensitive 4.3” panel integrated at eye level in the door handle with full commands and connections, or optional full 7” touchscreen with pre-installed connection allowing exclusive "B Connected monitoring functionalities

2 High quality materials
High quality new coating, certified medical devices quality and antibacterial, on high quality steel for a better longevity and easy hygiene control.

OUR STANDARDS OF COMPLIANCE – DEPENDING ON THE PRODUCT

- DIN 58345
- IMDG (2002/84/CE)
- ADR RID (2008/68/CE)
- ÖNORM K 2030
- ICAO-TI / IATA-DGR
- MEDICAL DEVICE
- RFID Solution

BLOOD MANAGEMENT SOLUTIONS

SAFETY GLOBAL BLOOD MANAGEMENT
European Medical Device Directive 93/42/EEC

B Medical Systems S.à r.l. successfully passed the certification audit according to the harmonized European Quality Management System Standard for Medical Devices EN 13485 and the European Medical Device Directive 93/42/EEC.

All medical devices manufactured by B Medical Systems S.à r.l. will be labeled with the CE-Label (CE 0123). The product in question concerns blood product cooling devices / blood bank refrigerators. A blood storage refrigerator and a blood storage freezer are devices intended for medical purposes that are used to preserve blood and blood products by storing them at cold or freezing temperatures.

Our medical device products will be all blood banks refrigerators from our range B, as well as all plasma freezers from our ranges F and U, all platelet agitators from our range PA and all contact shock freezers from our range CSF.

WHY THE EN 13485 CERTIFICATION?

This EN Standard was published in 2003 and represents the requirements for a comprehensive management system for the design and manufacture of Medical Devices.

This certificate demonstrates that an organization is able to provide Medical Devices and related services, meeting customer and regulatory requirements applicable to medical devices and related services. The primary objective is to facilitate harmonized Medical Device regulatory requirements for quality management systems.

The positive assessment to this certificate allows the CE Mark and the permission to sell the Medical Device in the European Union.

THE REAL IMPORTANCE OF THE DIRECTIVE 93/42/EEC


The Medical Device calls for all manufacturers who distribute in the European Economic Area to comply with essential requirements that benefits the safety of those in the EEA. The devices must be designed and manufactured in such a way that as they are used by users, they will no way compromise the health of patients.
In order to meet the specific management and traceability needs of the blood transfusion process, B Medical Systems has developed the 2BH-RFID solution—allowing optimized tracking of blood bag information via Radio-Frequency Identification (RFID) technology. As part of the identification process during the preparation stage, an RFID chip is fixed on to each blood bag. When an order comes in from a healthcare establishment, the distribution operator selects the bags and encodes each bag’s RFID chip with its destination. The blood donation number and product code registered to the chip are read automatically, which allows the central information system to be interrogated and to record specific data on each blood bag, the deadline for its return to the blood establishment, destination and patient information.

**Complete Transparency from Donor to Recipient**

In order to meet the specific management and traceability needs of the blood transfusion process, B Medical Systems has developed the 2BH-RFID solution—allowing optimized tracking of blood bag information via Radio-Frequency Identification (RFID) technology. As part of the identification process during the preparation stage, an RFID chip is fixed on to each blood bag. When an order comes in from a healthcare establishment, the distribution operator selects the bags and encodes each bag’s RFID chip with its destination. The blood donation number and product code registered to the chip are read automatically, which allows the central information system to be interrogated and to record specific data on each blood bag, the deadline for its return to the blood establishment, destination and patient information.

**Our 2BH-RFID Solution Offers the Following Key Benefits:**

- **Reliable identification and traceability of blood bags.** The blood donation number, product code and all-important patient information are automatically recorded in the RFID chip’s memory.

- **Patient safety.** Digital management of the transfusion chain eliminates retranscription errors and guarantees delivery of the right product to the right patient.

- **Savings on a rare resource.** Complete information on a blood bag’s identity and temperature allows better use of a rare resource. Remaining unused blood bags no longer need to be thrown away, as the chips accurately indicate their status.

- **Optimal operational efficiency.** By providing information on remote stocks and real-time visibility in the supply chain, our solution supports streamlined distribution and a reduction in costs.
Platelet Agitators
B Medical Systems | PA Range

New exclusive integrated incubator and platelet agitator for a better product safety
> according to Medical Device 93/42/EEC

1. Exclusive individual motion system
   Each tray has its individual motion system and access through its own door. This exclusive individual start and stop system allows work on a specific tray without affecting the motion of the others and ensures a better temperature stability of the unit. Each tray has its own LED lighting.

2. Best storage capacity
   For the same footprint, our platelet agitators offer the best storage capacity per square meter. A wide range of storage capacities are available: 3 to 14 trays per unit.

3. Motion adaptable to your needs
   The platelet motion is adaptable according to the needs of the user. Three motion types are available: linear, elliptic or circular.

4. Autonomous integrated incubator
   Our unique two-in-one incubated platelet agitators offer movement, cooling or heating in ONE global module within an optimized footprint.

5. Built-in rechargeable battery backup
   In case of power failure, the built-in rechargeable battery backup provides continuous movements up to 1 hour for 14 trays and air circulation.

6. Easy maintenance and cleaning
   All parts of our platelet agitators are easily removable to make cleaning and maintenance simple (doors and trays are easily removable; each individual motion system is replaceable within 5 minutes).

The product range Platelet Agitators offers modularity from 3 trays for a capacity of 30 bags (500 ml) to 14 trays for a capacity of 140 bags (500 ml), capacity is adjustable to your needs from 3 to 14 trays.

Subject to change without prior notice. Some of the accessories shown in the pictures are optional. The figures are approximate, and may vary based on the number of bags that are actually stored and the different bag manufacturers' specifications available on the market, the actual bag sizes as well as the individual user’s practice of loading.
**Platelet Agitators**

<table>
<thead>
<tr>
<th></th>
<th>PA 31</th>
<th>PA 41</th>
<th>PA 51</th>
<th>PA 61</th>
<th>PA 71</th>
<th>PA 81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individual trays (standard)</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Storage capacity (500ml bags)</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>External dimensions H x W x D (mm)</td>
<td>760 x 1035 x 725</td>
<td>830 x 1035 x 725</td>
<td>900 x 1035 x 725</td>
<td>970 x 1035 x 725</td>
<td>1040 x 1035 x 725</td>
<td>1110 x 1035 x 725</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>PA 91</th>
<th>PA 101</th>
<th>PA 111</th>
<th>PA 121</th>
<th>PA 131</th>
<th>PA 141</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of individual trays (standard)</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Storage capacity (500ml bags)</td>
<td>90</td>
<td>100</td>
<td>110</td>
<td>120</td>
<td>130</td>
<td>140</td>
</tr>
<tr>
<td>External dimensions H x W x D (mm)</td>
<td>1180 x 1035 x 725</td>
<td>1250 x 1035 x 725</td>
<td>1320 x 1035 x 725</td>
<td>1390 x 1035 x 725</td>
<td>1460 x 1035 x 725</td>
<td>1530 x 1035 x 725</td>
</tr>
</tbody>
</table>
Blood Bank Refrigerators
B Medical Systems | B Range

Refrigerators for the legally safe storage of blood bags / erythrocyte concentrates
> according to DIN 58371, ÖNORM K 2030 & Medical Device 93/42/EEC

1 Integrated multi-function electronics
Integrated B Medical Systems multi-function electronics, at easy access level, in the door handle; compatible with a "B Connected monitored solution.

2 Lifetime warranty corrosion-free cabinet
- One piece material cabinet with a lifetime warranty for zero corrosion, highest quality polypropylene for a better insulation and no sharp edges to provide easier maintenance and cleaning
- Easier, safer handling as the lower weight of corrosion free material offers better stability with heavier components placed at the bottom

3 High storage capacity
High storage per square meter in terms of net volume, with a very versatile inner volume utility due to the multiple user friendly rails allowing modularity.

1 Exclusive innovative handle bar (patent pending)
All functionalities at easy reach:
- Open/close - Heavy duty lock mechanism
- Digital control with full functionalities - Standard multifunction digital sensitive 4.3'' panel integrated at eye level in the door handle with full commands and connections, or optional full 7'' touchscreen with pre-installed connection allowing exclusive "B Connected monitoring functionalities

2 High quality materials
High quality new coating, certified medical devices quality and antibacterial, on high quality steel for a better longevity and easy hygiene control.

3 Highest insulation value (organic glass door)
4-layer (Precision Line) and 5-layer (Premium Line) PMMA organic glass offering highest insulation, combined with reduced weight reducing efforts to close door and constraints on hinges, offering a better longevity.

Subject to change without prior notice. Some of the accessories shown in the pictures are optional. The figures are approximate, and may vary based on the number of bags that are actually stored and the different bag manufacturers' specifications available on the market, the actual bag sizes as well as the individual user's practice of loading.
**BLOOD BANK REFRIGERATORS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Gross / Net volume (l)</th>
<th>Storage capacity (blood bags)</th>
<th>External dimensions H x W x D (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 51</td>
<td>52 / 45</td>
<td>24 (450ml) / 32 (350ml)</td>
<td>660 x 495 x 515</td>
</tr>
<tr>
<td>B 131</td>
<td>121 / 106</td>
<td>51 (450ml) / 69 (350ml)</td>
<td>820 x 595 x 635</td>
</tr>
<tr>
<td>B 291</td>
<td>297 / 269</td>
<td>171 (450ml) / 231 (350ml)</td>
<td>1660 x 595 x 635</td>
</tr>
<tr>
<td>B 381</td>
<td>362 / 329</td>
<td>pending</td>
<td>1980 x 595 x 635</td>
</tr>
<tr>
<td>B 401</td>
<td>451 / 384</td>
<td>255 (450ml) / 345 (350ml)</td>
<td>1988 x 610 x 973</td>
</tr>
<tr>
<td>B 501</td>
<td>598 / 510</td>
<td>340 (450ml) / 460 (350ml)</td>
<td>1988 x 756 x 973</td>
</tr>
<tr>
<td>B 701</td>
<td>747 / 636</td>
<td>425 (450ml) / 575 (350ml)</td>
<td>1988 x 903 x 973</td>
</tr>
<tr>
<td>B 901</td>
<td>895 / 763</td>
<td>510 (450ml) / 690 (350ml)</td>
<td>1988 x 1050 x 973</td>
</tr>
</tbody>
</table>

**THE B RANGE COMPRIS 8 BLOOD REFRIGERATORS THAT ARE BUILT IN COMPLIANCE WITH THE REQUIREMENTS OF:**

- DIN 58371 (Germany, “Blutkonserven-Kühlgeräte”/ Blood Refrigerators)
- ÖNORM K 2030 (Austria, “Blutkonserven-Kühlschränke”/ Blood Refrigerators)
- European Medical Device Directive 93/42/EEC
- AS 3864 (Australia, “Medical refrigeration equipment – for the storage of blood & blood products”)
- European Directive “Guideline to preparation, use and quality assurance of blood components”
Plasma Storage Freezers
B Medical Systems | F Range

Freezers for the low-temperature storage of plasma and other substances under optimum conditions > according to DIN 58375 & Medical Device 93/42/EEC

1 Integrated multi-function electronics
Integrated B Medical Systems multi-function electronics, at easy access level, in the door handle; compatible with a “B Connected monitored solution.

2 Lifetime warranty corrosion-free cabinet
- One piece material cabinet with a lifetime warranty for zero corrosion, highest quality polypropylene for a better insulation and no sharp edges to provide easier maintenance and cleaning
- Easier, safer handling as the lower weight of corrosion free material offers better stability with heavier components placed at the bottom

3 High storage capacity
High storage per square meter in terms of net volume, with a very versatile inner volume utility due to the multiple user friendly rails allowing modularity.

1 Exclusive innovative handle bar (patent pending)
All functionalities at easy reach:
- Open/close - Heavy duty door lock mechanism
- Digital control with full functionalities - Standard multifunction digital sensitive 4.3” panel integrated at eye level in the door handle with full commands and connections, or optional full 7” touchscreen with pre-installed connection allowing exclusive “B Connected monitoring functionalities

2 High quality materials
High quality new coating, certified medical devices quality and antibacterial, on high quality steel for a better longevity and easy hygiene control.

3 Special features (models F 401-501-701-901)
- New evaporator offering better performance than market average, resulting in less building of ice and automatic defrost
- Insulated inner doors for significantly lower loss of cold when opening

The product range Plasma Storage Freezers offers volumes from 121 to 895 litres. F models are the perfect solution for a safe storage and handling of temperature-sensitive preparations such as plasma and other blood products in conformity with national and international norms and guidelines (DIN 58375 & Medical Device 93/42/EEC).

Subject to change without prior notice. Some of the accessories shown in the pictures are optional. The figures are approximate, and may vary based on the number of bags that are actually stored and the different bag manufacturers’ specifications available on the market, the actual bag sizes as well as the individual user’s practice of loading.
### Plasma Storage Freezers

<table>
<thead>
<tr>
<th>Model</th>
<th>Gross / Net volume (l)</th>
<th>Storage capacity (plasma bags)</th>
<th>External dimensions H x W x D (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F 131</td>
<td>121 / 106</td>
<td>69 (350ml)</td>
<td>823 x 595 x 635</td>
</tr>
<tr>
<td>F 291</td>
<td>297 / 269</td>
<td>231 (350ml)</td>
<td>1660 x 595 x 635</td>
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<tr>
<td>F 381</td>
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<td>575 (350ml)</td>
<td>1988 x 903 x 973</td>
</tr>
<tr>
<td>F 901</td>
<td>895 / 763</td>
<td>690 (350ml)</td>
<td>1988 x 1050 x 973</td>
</tr>
</tbody>
</table>
Distribution Freezers for the low-temperature storage of temperature-sensitive preparations under optimum conditions > according to Medical Device 93/42/EEC

1 Exclusive innovative handle bar (patent pending)
All functionalities at easy reach:
- Open/close - Heavy duty door lock mechanism
- Digital control with full functionalities - Standard multifunctional digital sensitive 4.3” panel integrated at eye level in the door handle with full commands and connections, or optional full 7” touchscreen with pre-installed connection allowing exclusive "B Connected monitoring functionalities

2 High quality materials
High quality new coating, certified medical devices quality and antibacterial, on high quality steel for a better longevity and easy hygiene control.

3 Special features (U range)
- Integrated pressure release valve in the door permitting faster opening in one move, and offering easy access for cleaning or defrost
- Insulated inner doors for significantly lower loss of cold when opening
- Full compatibility of inner modules and rails, no need to buy new racks, you can keep racks previously used in different U models

The product range Distribution Freezers offers volumes from 451 to 895 litres. U models reflect the highest and most uncompromising requirements with state-of-the-art technology and economy. The cooling system is optimally designed with respect to energy consumption as well as to the development of waste heat and noise. Standard factory setpoint is -41°C, temperature is adjustable from -20°C to -86°C.

Subject to change without prior notice. Some of the accessories shown in the pictures are optional. The figures are approximate, and may vary based on the number of bags that are actually stored and the different bag manufacturers’ specifications available on the market, the actual bag sizes as well as the individual user’s practice of loading.
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INTEGRATED PRESSURE RELEASE VALVE

This aluminium die cast mechanism offers a strong and ergonomic handle that allows to open the door with one hand while releasing the vacuum inside distribution freezers. This change in the position of the vacuum release valve provides an easy access to clean it.

The mechanism can also be locked electronically through the interface via a solenoid.

<table>
<thead>
<tr>
<th>Gross / Net volume (l)</th>
<th>U 401</th>
<th>U 501</th>
<th>U 701</th>
<th>U 901</th>
</tr>
</thead>
<tbody>
<tr>
<td>451 / 434</td>
<td>598 / 577</td>
<td>747 / 720</td>
<td>895 / 863</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage capacity (plasma bags)</th>
<th>U 401</th>
<th>U 501</th>
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<tbody>
<tr>
<td>345 (350ml)</td>
<td>460 (350ml)</td>
<td>575 (350ml)</td>
<td>690 (350ml)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage capacity (cryoboxes)</th>
<th>U 401</th>
<th>U 501</th>
<th>U 701</th>
<th>U 901</th>
</tr>
</thead>
<tbody>
<tr>
<td>300 (50 x 136 x 136 mm)</td>
<td>400 (50 x 136 x 136 mm)</td>
<td>500 (50 x 136 x 136 mm)</td>
<td>600 (50 x 136 x 136 mm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage capacity (vials 2ml)</th>
<th>U 401</th>
<th>U 501</th>
<th>U 701</th>
<th>U 901</th>
</tr>
</thead>
<tbody>
<tr>
<td>30000</td>
<td>40000</td>
<td>50000</td>
<td>60000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>External dimensions H x W x D (mm)</th>
<th>U 401</th>
<th>U 501</th>
<th>U 701</th>
<th>U 901</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988 x 610 x 973</td>
<td>1988 x 756 x 973</td>
<td>1988 x 903 x 973</td>
<td>1988 x 1050 x 973</td>
<td></td>
</tr>
</tbody>
</table>
Contact Shock Freezers
B Medical Systems | CSF Range

High performance contact shock freezing technology for blood plasma, biological and pharmaceutical preparations > according to Medical Device 93/42/EEC

1 Fastest contact shock freezers worldwide
Our contact shock freezers provide the shortest freezing cycle on core temperature of -30°C: nearly 100 units of 250 ml within less than 60 minutes.

2 State-of-the-art contact freezing technology™
Our innovative and patent pending system of inclined trays delivers the most homogeneous freezing and offers the best in repeatability and productivity, with operator independent performance for 100% performance consistency.

3 Highest degree of ergonomics
Each tray has an effective and usable height, giving easier access for quicker loading and enabling easier manipulation of bags.

4 Optimized pull-down of the layers
The freezing down is quicker, the clinical payback on investment is maximised and the concentration of factors 8, 9 and albumin is increased.

5 Integrated multi-function electronics
Located at eye level, the electronics are easily accessible and can be connected with our fully integrated monitored solutions for a complete traceability of frozen bags.

6 Maintenance-friendly design
Our contact shock freezers offer an easy cleaning and disinfection facility.

The product range Contact Shock Freezers are designed for the fast freezing of blood plasma, biological and pharmaceutical preparations to a core temperature of -30°C. CSF models are built in compliance with directives for the preparation of blood plasma.

Subject to change without prior notice. Some of the accessories shown in the pictures are optional. The figures are approximate, and may vary based on the number of bags that are actually stored and the different bag manufacturers’ specifications available on the market, the actual bag sizes as well as the individual user’s practice of loading.
SAVING LIVES THROUGH RELIABLE AND INNOVATIVE TECHNOLOGY

Contact Shock Freezers

**CSF 61**

- Freezing capacity (plasma bags): 20 at 1000ml (content 850ml) / 60 at 350ml (content 250ml)
- Freezing time to core temperature of -30°C: 20 units (1000ml) ± 45 min / 60 units (350ml) ± 55 min
- Operating temperature (preset), reached within ± 10 min (pre-cooling phase): -45°C (upper & lower contact plate)
- External dimensions H x W x D (mm): 1910 x 1080 x 830

**CSF 101**

- Freezing capacity (plasma bags): 32 at 1000ml (content 850ml) / 96 at 350ml (content 250ml)
- Freezing time to core temperature of -30°C: 32 units (1000ml) ± 45 min / 96 units (350ml) ± 55 min
- Operating temperature (preset), reached within ± 10 min (pre-cooling phase): -45°C (upper & lower contact plate)
- External dimensions H x W x D (mm): 1910 x 1500 x 830

**OPTIMIZED CONTACT FREEZING**

- Levels operate independently, allowing simultaneous freezing and defrosting as necessary
- Inclined plates at 5° ensure full contact with plasma and minimizes effect of air trapped in bags negatively influencing repeatability of freezing cycle times, providing operator independent performance for 100% performance consistancy
Transport Systems
B Medical Systems | MT Range

Transport Systems for the safe transport of temperature-sensitive products
> according to ADR / RID / IMDG / ICAO-TI / IATA-DGR

<table>
<thead>
<tr>
<th>Cooling system</th>
<th>MT 2</th>
<th>MT 4</th>
<th>MT 8</th>
<th>MT 12</th>
<th>MT 25</th>
<th>MT 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive</td>
<td>Passive</td>
<td>Passive</td>
<td>Passive</td>
<td>Passive</td>
<td>Passive</td>
<td>Active (Compressor)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gross volume (l)</th>
<th>2.2</th>
<th>8</th>
<th>20</th>
<th>24</th>
<th>44</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage capacity (bags)</td>
<td>1 (450ml) / 2 (270ml)</td>
<td>4 (450ml) / 6 (270ml)</td>
<td>8 (450ml) / 14 (270ml)</td>
<td>15 (450ml) / 25 (270ml)</td>
<td>25 (450ml) / 40 (270ml)</td>
<td>48 (450ml)</td>
</tr>
<tr>
<td>External dimensions H x W x D (mm)</td>
<td>210 x 250 x 150</td>
<td>299 x 362 x 283</td>
<td>437 x 588 x 288</td>
<td>499 x 550 x 475</td>
<td>499 x 710 x 550</td>
<td>1000 x 520 x 800</td>
</tr>
</tbody>
</table>

The product range Transport Systems offers volumes from 2.2 to 90 litres. The model range MT consists of five passive transport systems and one active transport box, working with a compressor. B Medical Systems transport systems are ideal for intensive use with many transport applications, even under difficult climatic conditions.

MT models conform with the European agreement on the international transport of hazardous goods by Road (ADR), by Rail (RID), by sea (IMDG) and with the International agreement for air transport (ICAO-TI / IATA-DGR).

For all passive transport boxes eutectic cooling systems are available as an option (-32°C, +4°C, +22°C and +37°C).
Optimum control and protection
B Medical Systems | °B Connected & DCU

°B CONNECTED | MONITORING SOFTWARE

Universal software for the monitoring of refrigeration devices, including the acquisition, recording and visualization of temperature data.

- Unique monitoring software of the full range of Blood Management Solutions and Medical Refrigeration products
- Web-based interfaces for computers and mobile devices
- Modern design for simple and intuitive use
- Graphic display of temperature curves
- Integrated event and activity history of appliances’ components
- Data recording on centralized database for long-term archiving
- Easy setting of specific alarm forwarding, via email or SMS
- Generation of reports compiling crucial data and activities
- Temperature and detailed device data export for third-party software
- Important price advantage compared to a traditional circular chart recorder and its spare parts
- REST API to access raw data directly from the database in read only mode

KEY BENEFITS:

- Unique interface for the monitoring of the full range of refrigeration devices
- Centralized database providing data access to entire customer network

DCU | DATA COMMUNICATION UNIT

Hardware module monitoring all operating conditions and passing them through to a central database – via local network.

- Interface connection of B Medical Systems appliances to an existing network
- Graphical user interface displaying temperature and configuring devices and alarms easily
- Direct connection to Ethernet and serial bus RS485
- Connection port to temperature sensor
- Digital in/out (programmable and customer-specific use)
- Recording and storing appliance relevant data
- Integrated USB port and SD-card reader allowing to export stored data
- Bluetooth interface for technical support and data export
- The DCU combined with the °B Connected software replaces the paper temperature recorder
- All data are recorded and save in the internal storage of the DCU and backed up in °B Connected data base if connected
- Several additional self-sufficient temperature sensors (up to 4 PT1000) may be connected
- Humidity sensor

KEY BENEFITS:

- Central system collecting relevant temperature data of the appliances and their respective operating conditions
- A number of connection facilities allowing flexible upgrades for individual projects

°B Connected & DCU in combination offer a highly flexible system that is adaptable to specific customer requirements

> Complete & legally safe documentation of temperature data
> Comprehensive applications and diagnostic possibilities

SAVING LIVES THROUGH RELIABLE AND INNOVATIVE TECHNOLOGY
B Medical Systems (formerly Dometic Medical Systems) has more than 35 years’ experience in the medical refrigeration sector.

The company, formerly known as Electrolux Medical Systems, was founded in 1979 when the World Health Organization approached Electrolux in Vianden, Luxembourg, to create a solution for the safe storage and transport of vaccines around the world. In 2001, Electrolux Medical Systems became part of the Dometic Group, and was renamed Dometic Medical Systems. Having established a legitimate reputation in the medical equipment industry, the company has also become a global leader in vaccine cold chain.

SAVING LIVES THROUGH RELIABLE AND INNOVATIVE TECHNOLOGY

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