



Mistral-Air®

Forced Air Warming



MA1200-EU/US

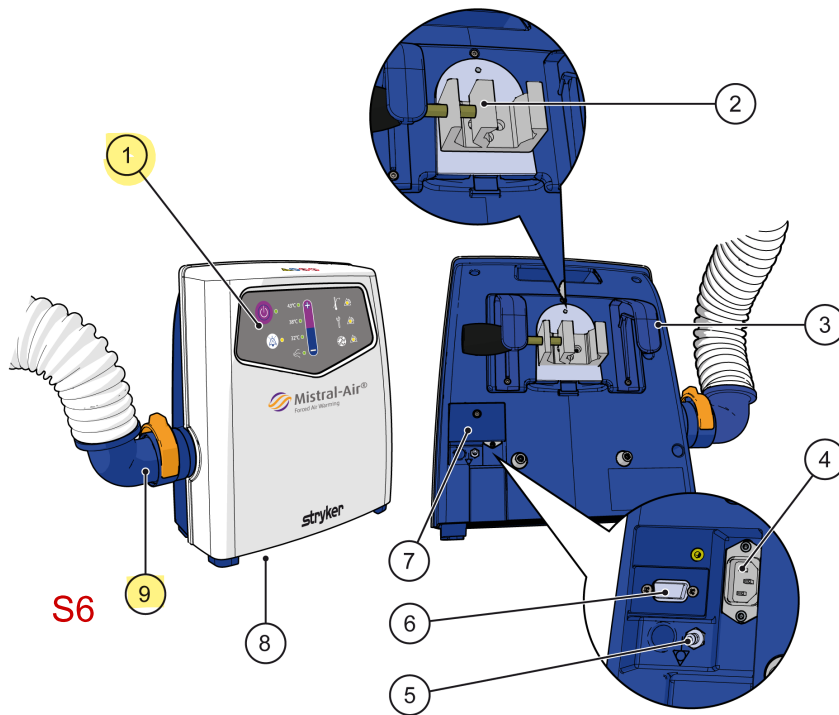


MA1200-QC-EU/US

User Manual

Forced Air Warming Unit

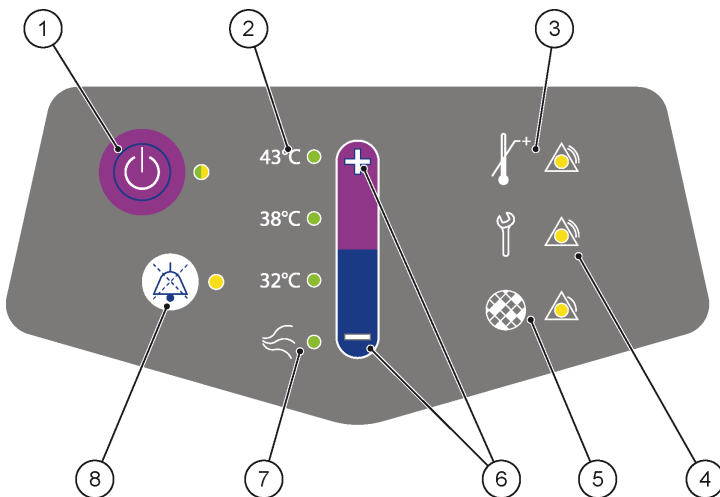
3.2 Overview of the Mistral-Air® Warming Unit (MA1200-QC)



- S3** 1. Control panel
- 2. Mounting clamp
- 3. Mounting options (accessory)
- 4. Appliance inlet
- 5. Equipotential pin
- 6. Data connection
- 7. Mains cover
- 8. Filter (air inlet)
- S6** 9. Removable hose

S3 3.3 Overview of the control panel

The control panel is located at the front top of the device and can be operated by pressure sensitive buttons. The device is easy to use. All settings are visible on the control panel and you can select the preferred temperature by pressing the temperature selection buttons. When an alarm condition is detected, an audible alarm will be activated and an alarm LED will flash yellow.



- 1. Standby button
- 2. Temperature selection indicators
- 3. Overtemperature alarm LED
- 4. Technical alarm LED
- 5. Filter replacement indicator LED
- 6. Temperature selection + and – buttons
- 7. Fan only/ambient air indicator
- 8. Temporarily audible alarm suppression button

3.4 Visual and audible warning systems

S8 The device is equipped with visual and audible warning systems to protect against excessive temperatures, to warn for a technical malfunction, and to indicate that filter change is required.

If equipment errors occur, an audible alarm sounds and the relevant LED indicator(s) on the control panel will flash or light up continuously.

There are four different alarms/indicators:

- Technical alarm
- Overtemperature alarm
- Microcontroller watchdog alarm
- Filter replacement indicator

These alarms/indicators are described in the sections below. It is also possible to temporarily suppress the audible alarm.

S8 Alarm/indicator summary

Alarm/indicator	Priority	Behavior
Technical alarm	Medium	Technical alarm LED: Yellow flashing Audible alarm: 3 beeps repeated every 6 seconds
Overtemperature alarm	Medium	Technical alarm LED: Yellow flashing Overtemperature alarm LED: Yellow flashing Audible alarm: 3 beeps repeated every 6 seconds
S4 Microcontroller watchdog alarm	Medium	Technical alarm LED: Yellow continuous Overtemperature alarm LED: Yellow flashing Audible alarm: continuous beep
Filter replacement indicator	Low	Filter replacement indicator LED: Yellow continuous Audible alarm: 1 short beep

3.4.1 Technical alarm

A flashing yellow technical alarm LED indicates that a technical error has occurred and the air temperature cannot be accurately controlled. The visual alarm is accompanied by an audible alarm, which consists of three pulses of 200 ms duration, with 200 ms spacing between each pulse. This pattern is repeated every 6 seconds.

Some possible causes of this alarm:

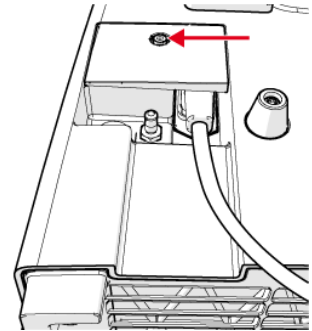
5 Set up

5.1 Transport and storage

Store the device and accessories according to the transport and storage recommendations. See *Specifications* on page 43.

5.2 Connecting the power supply cord

1. Remove the mains cover using a 4 mm hex key.
2. Attach the C13 plug of the power supply cord.
3. Reattach the mains cover to lock the C13 plug by tightening the 4 mm hex screw with a maximum torque of 1.5 ± 0.2 Nm.



5.3 Attaching the mounting parts

The MA1200 mounting parts set consists of the following parts:

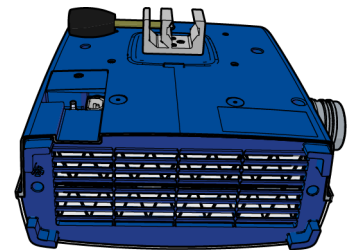
- 1x Wall mount
- 1x Cover
- S5** • 2x Handle
- 1x Cover plate
- 2x Bed support knobs
- 5x M6 x 6 Button head 4 mm hexagon screw
- 5x M4 x 16 Low Cylindrical head 3 mm hexagon screw
- 2x DELTA PT Torx 20IP screw 40 x 16



Caution!

Be careful not to scratch the front of the device.

1. Disconnect the device from the mains socket.
2. Place the device face-down on a soft surface.



6 Operation

6.1 Safety instructions before operation



Warning!

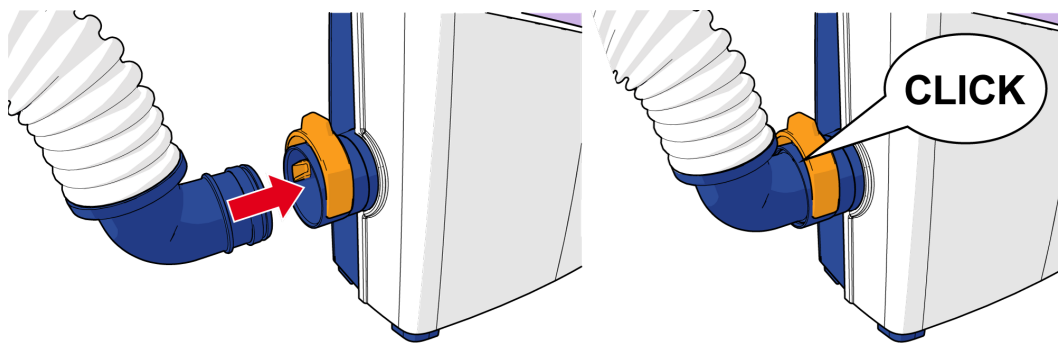
When using the device, first read the warnings in *Warnings* on page 8.

S1 The device is intended to be used only by trained clinicians. **Intended patient population: adults and pediatric patients.**

The clinical areas are: operating room, recovery room, anaesthetic room, intensive care unit, medical/surgical floors and emergency room. Mainly used during the entire perioperative pathway (pre-, per-, and postoperative period).

6.2 Connecting the Mistral-Air[®] QC Hose (MA1200-1018 & MA1200-1018XL) to the device

1. Check the QC Hose or QC Hose XL for damage.
2. Hold on to the front-end hose connector (knee part).
3. Place the front-end of the hose into the quick connector.
4. Press the connector firmly into the blower until a "click" is produced.
5. Check to ensure the hose is firmly connected.



The QC Hose can be rotated 360° for optimal range.

6.3 Connecting the power supply



See *Connecting the power supply cord* on page 27 if the power supply cord is not yet connected to the device.

7 Maintenance



Warning!

- Maintenance may only be performed by trained biomedical technicians or engineers. Both user groups must be trained by certified trainers from The 37Company.
- Preventive maintenance needs to be performed on an annual basis. Please refer to the Mistral-Air® technical manual for maintenance, repair and calibration instructions. The Mistral-Air® technical manual is available for download at the business partner menu of the The 37Company website.



Caution!

Clinical users may not repair or open the device in the event of a malfunction. This can damage the appliance and will invalidate the warranty.

Have the device serial number ready when you contact the hospital service department or the local supplier for technical support. The serial number is located on the label on the back of the device.

Before performing maintenance, consult the device insulation diagram below.

