

INFANT RESUSCITATION CABINET

INSTALLATION INSTRUCTIONS



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SPECIFICATIONS AND TECHNICAL DATA

Radiant Warmer

Model	CERATHERM
Type	600-3
Article number	521A-60020-3
Conformity	CE mark (Directive 93/42/EEC, Annex II)
Notified Body	TÜV SÜD Product Service (CE 0123)
IP protection class	IP20
Contamination level class	2
Electrical protection rating	I (with protective earth connection)
Medicinal product class	IIb (Directive 93/42/EEC, Annex IX, Rule 9)
Applied industrial standards:	-EN 60601-1:2007 -EN 60601-2-21:2010 -EN 60601-1-2:2006
Mains connection voltage	230 V +/-10%, 50–60 Hz
Power consumption, standby	0.03 VA
Power consumption, max.	630 VA
Fuses	2 x 3.15 AT microfuses, 5 x 20mm (in the unit socket) 1 x 800mAT microfuse, 5 x 20mm (internal on the powerboard)
External conditions during <i>transport</i>	-Temperature: -10 to +50 °C -Relative air humidity: 20 to 90% (no condensation)
External conditions during <i>storage</i>	-Temperature: -10 to +50 °C -Relative air humidity: 20 to 90% (no condensation)
External conditions during <i>operation</i>	-Temperature: +5 to +30 °C -Relative air humidity: 20 to 90% (no condensation)
Heating element	Ceramic, 600 W, wavelength 2-10µm (IR-B/C)
Lighting	LED, 1 x 3W / 700mA / 4.5V, colour temperature 4000°K, without built-in power source
Alarms	-Acoustic and visual after 15 minutes, with automatic heat output reduction to 20% of maximum output. -Mains failure -Technical malfunction (with error code)
Operating position	Horizontal, heat radiating vertically downwards
Transport	In original packaging
Safety checks	Every 12 months as per service manual specifications
Disposal	In accordance with Directive 2002/96/EC. Get in touch with your allocated sales partner.
Dimensions	270 x 105 x 540 mm (W x H x L)
Weight	4.3 kg (without accessories)
Material, housing	ABS (temperature-resistant plastic)
Material, chassis	CNS (stainless steel)
Material, reflector	CNS (stainless steel)

Low Flow Air/Oxygen Blender (if specified)

Device-Specific Standards: Complies with ISO 11195 : 1995.

Oxygen % Range: 21% to 100%

Oxygen % Accuracy: $\pm 3\%$ of full scale

Supply Pressure: Both supplies within range of 30-75 psi (207-517 kPa) and air & oxygen must be within 10 psi (69 kPa) of each other. Do not use on a patient or with a ventilator outside of this range.

Maximum Flow: ≥ 30 LPM (Low Flow blender) @ 60% setting & 50 psi (345 kPa) inlet pressures.

Pressure Drop: < 6 psi (42 kPa) at 50 psi (345 kPa) inlet pressure and 10 LPM flow.

Alarm/Bypass Reset: when inlet gas pressure differential is ≥ 6 psi (42 kPa).

Alarm Intensity: 80 dB at 30 cm (1 ft)

Input fittings: Oxygen NIST, Air NIST

Output Fitting(s): Male DISS, oxygen type.

Dimensions: Height: 8.9 cm (3 1/2")

Width: 5.7 cm (2 1/4")

Depth: 7.3 cm (2 7/8")

Weight: 1.25 Kg (2 3/4 lbs)

No electronics incorporated

Reverse Gas Flow: From either gas inlet to the other is zero (complies with clause 6 of ISO 11195).

Introduction

The Viamed Infant Resuscitation Cabinet contains a carefully selected group of products; each main item can be purchased as a single item for use individually.

Viamed have combined these devices into one product in an arrangement ideally suited to Maternity and Neonatal Intensive Care environments.

Devices forming component parts of the Resuscitation Cabinet:

- Cabinet with drop down door, housing integral bed and mattress
- Wall-mounted Ceratherm 600-3 radiant warmer
- Tom Thumb infant resuscitation unit (various gas delivery options available)
- Low suction controller (various manufacturers' units available)
- Suction receiving jar
- Digital Apgar timer
- Storage bins
- Air/oxygen blender (optional)

All the components carry the correct and relevant CE marking.

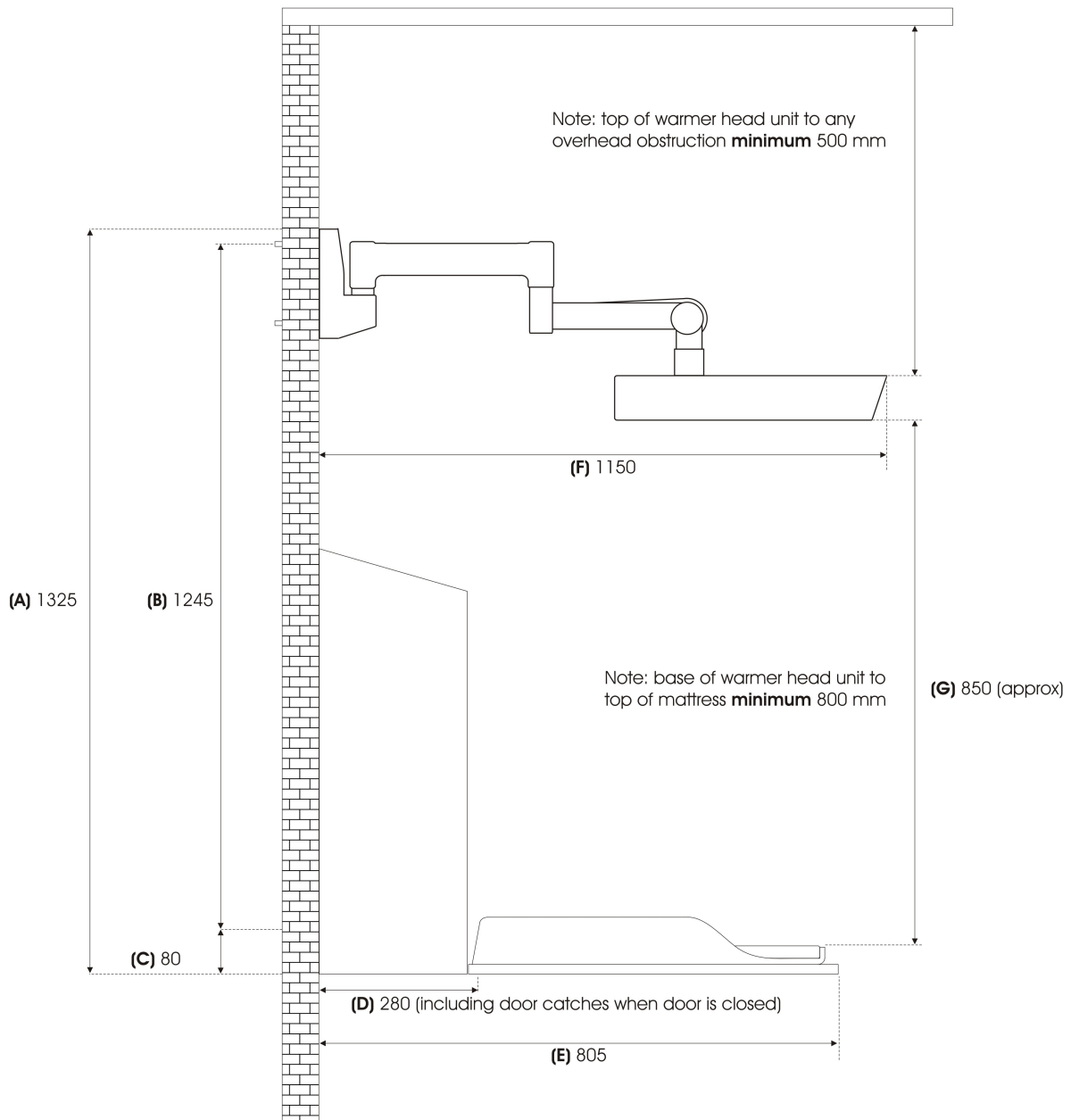


IMPORTANT

Viamed does not offer an installation service for the wall-mounted resuscitation cabinet system. It is the responsibility of customers to ensure safe and secure installation in accordance with their own procedures and regulations.

It is strongly advised that a survey is undertaken by a qualified structural engineer in order to determine the appropriate method of mounting, also to ascertain if any wall-strengthening measures or other issues need to be addressed prior to installation.

Overall Installation



Overall installation - side view (dimensions in mm)

- (A) 1325 mm: base of the cabinet to the top of the wall bracket.
- (B) 1245 mm: lower cabinet securing bolt to the upper wall bracket-securing bolt.
- (C) 80 mm: base of the cabinet to the lower cabinet-securing bolt.
- (D) 280 mm: wall to the front of the cabinet when closed, including door catches.
- (E) 805 mm: wall to the front of the cabinet when open.
- (F) 1150 mm: maximum distance between the wall and the tip of the radiant warmer.
- (G) 850 mm: base of the radiant warmer head unit to the top of the mattress (note: due to the flexibility of the arm, this measurement is approximate).



NOTE

For the safety of the patient, a minimum distance of 800 mm must be maintained between the top of the mattress and the underside of the radiant warmer head-unit.

Mounting Heights

It is recommended that the cabinet be installed at a height of approximately 1 metre from the ground to the base of the cabinet; this may be varied according to end-user requirements in order to position the cabinet at a convenient working height.

The minimum distance of 800 mm must be maintained between the top of the mattress and the underside of the radiant warmer head-unit, however, it is not recommended that this distance be greater than 900 mm as such a distance may position the warmer beyond reach of the operator.

Overhead Clearance

It is important to allow a minimum of 500 mm overhead clearance from the upper surface of the radiant warmer head-unit to the ceiling, or any overhead obstruction, so as to allow adequate ventilation and allow the radiant warmer to vent excess heat upwards.

If the material above the radiant warmer head-unit is resistant to temperatures in excess of 60°C, the distance may be reduced to 400 mm.

If the cabinet system is to be installed into a cupboard, or furniture that will result in the radiant warmer being housed in an enclosed space, consideration should be given to allowing ventilation above the radiant warmer so as to allow excess heat to escape should the cupboard be closed with the warmer powered up. As a safety feature, the radiant warmer powers down to a safety-power setting of 20% should it be left unattended for longer than 15 minutes.

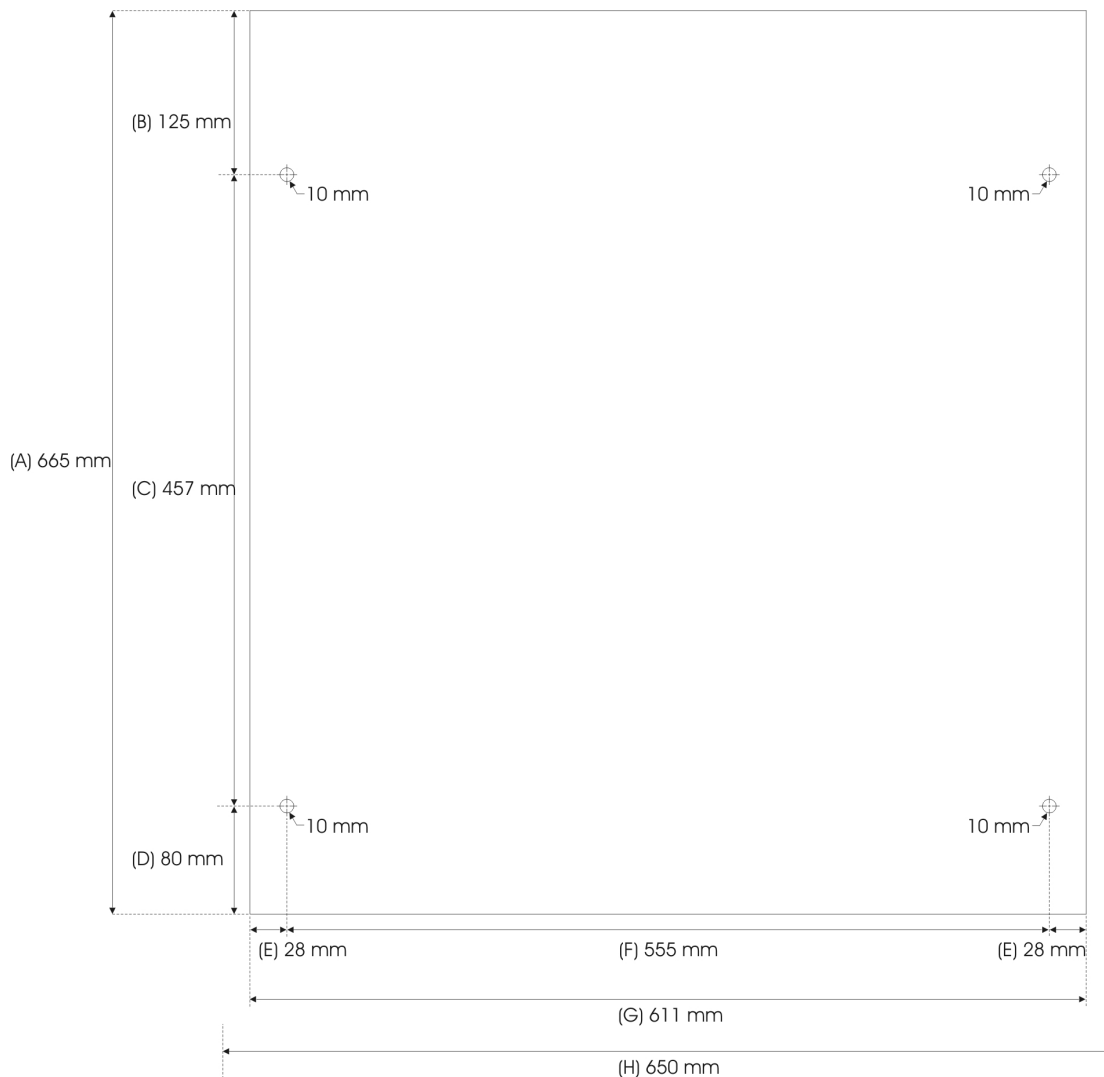
Cabinet

The cabinet has been custom designed to Viamed's specifications.

When loaded with standard equipment, the cabinet weighs approximately 25 Kg.

Allowance must be made for the additional weight of the infant, and potential forces applied by staff whilst using the equipment. In use, the cabinet is designed to handle loadings of an additional 25 Kg.

Cabinet Dimensions; Viewed from Rear



- (A) 665 mm: base of cabinet to top of cabinet.
- (B) 125 mm: top of cabinet to centre of upper mounting holes.
- (C) 457 mm: distance between centres of upper and lower mounting holes.
- (D) 80 mm: base of cabinet to centre of upper and lower mounting holes.
- (E) 28 mm: side of cabinet to centre of mounting holes.
- (F) 555 mm: distance between centres of left and right mounting holes.
- (G) 611 mm: width of cabinet back plate, not including side restraining bars.
- (H) 650mm: minimum width required to accommodate the cabinet including restraining bars.

Installation Notes

Due to differing wall constructions, Viamed do not supply fixings. A qualified installer or structural engineer must determine the appropriate fixings based on the results of a site survey.

The positions of mounting holes detailed in this manual are approximate and may vary due to manufacturing and design changes. Viamed recommends that the installer take the necessary measurements from the cabinet itself.

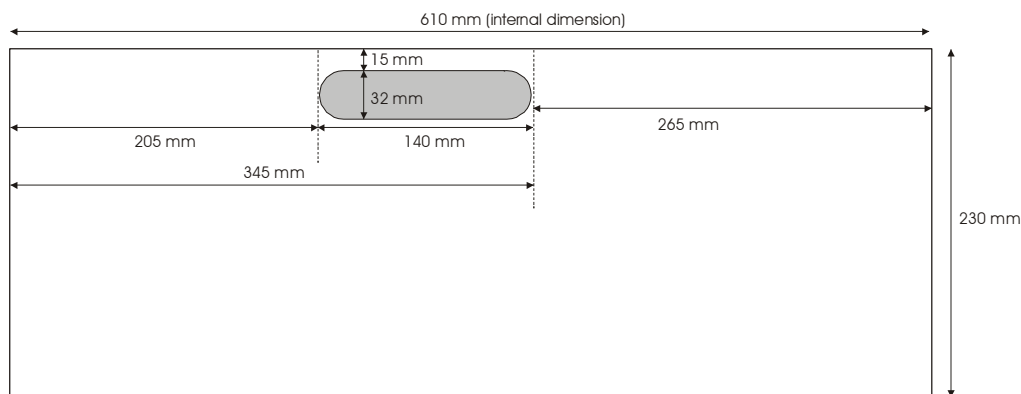
When deciding a position for the cabinet on the wall, consideration should be given to the amount of space required to allow easy access to the patient when in use. The cabinet is best mounted away from side walls, with enough space for a person to stand on either side of the drop-down platform.

After the cabinet system has been installed, care should be taken to clean the cabinet to ensure that no dirt or swarf from the installation process remains in or around the cabinet.

Gas Hose Access Slot

The cabinet has a gas hose access slot, located in the midpoint of the cabinet base, to allow the gas and suction hoses to enter the cabinet.

The cabinet system should be mounted in close proximity to the wall oxygen and vacuum outlets. The oxygen and suction hoses are 3 metres long, which after exiting the cabinet, leaves a length of approximately 2 metres of each hose external to the cabinet.



Internal dimensions for the internal base of the cabinet

If mounting the cabinet into a cupboard or enclosed space, a front-to-back depth of at least 280 mm should be allowed to account for the added depth of the door, catches and restraining bars.

If the cabinet is to be mounted directly onto a surface, a matching 'letterbox' access slot must be cut to allow for the gas hoses to drop through.

Whilst it has not proved necessary to date, due to tolerances in the manufacturing process concerning the placement of the door hinges, if the cabinet is to be mounted directly onto a surface, it would be prudent to verify that the cabinet door can be opened without fouling prior to permanently fixing the cabinet. If fouling occurs, a low plinth may be necessary.

Ceratherm 600-3 Infant Radiant Warmer

Comprehensive manuals covering Operation and Servicing of the Ceratherm 600-3 Infant Radiant Warmer are supplied with the Resuscitation Cabinet. Please refer to these manuals before use.

Electrical Considerations

Each Ceratherm 600-3 Infant Radiant Warmer is safety tested to Class 1, type B and a test report is supplied.

It is recommended that the equipment be retested for safety and function after installation, and annually thereafter.

The Infant Radiant Warmer hinged arm is supplied with a mains lead with a moulded, 13 Amp fused mains plug. The mains lead can be shortened and a replacement plug fitted if required, providing this complies with any regulations in place within the customer's organisation. Alternatively, the plug can be removed and the mains lead shortened and connected to a 13 Amp fused spur mains supply.

Weights of Component Parts

The following figures are provided to allow calculations of the loadings. It should be noted that the centre of gravity of the head unit of the radiant warmer is not central, but towards the rear of the unit.

- The hinged mounting arm (excluding wall bracket) weighs 3.3 Kg.
- The wall bracket weighs 1.7 Kg.
- The radiant warmer head unit weighs 4.85 Kg.
- The distance between the mounting points of the bracket is 190 mm.
- The diameter of the bracket mounting holes is 11 mm.
- The maximum distance between the wall and the tip of the radiant warmer on full extension is 1150 mm.

Cautions Concerning Installation of the Radiant Warmer

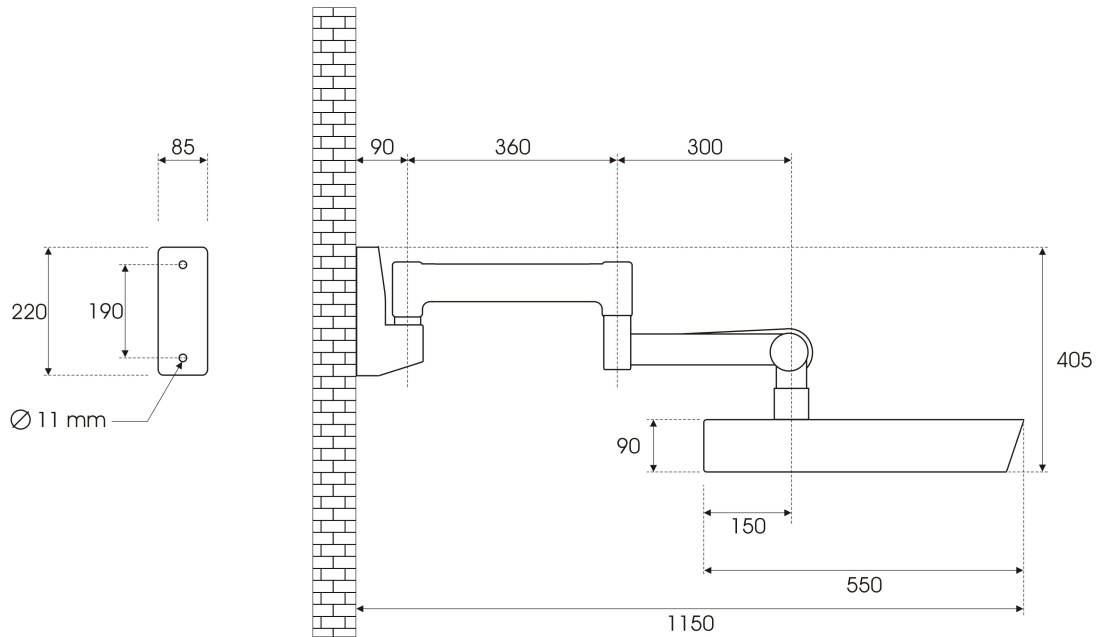
Handle the warmer with care; the ceramic heating element is fragile.

Do not touch the heating element with bare hands as this can adversely affect the performance of the element.

The heating element gets very hot in use; take care if the warmer has recently been used or tested. Use only the side handles to adjust the position of the warmer.

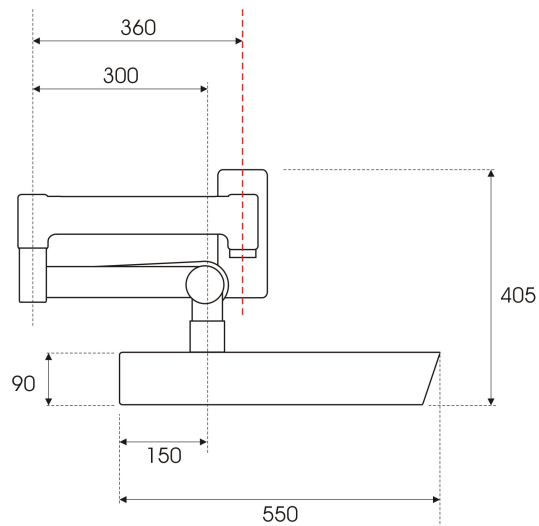
Use suitable fixings for the wall type, with due consideration for the moment of force that the fixings and wall will be required to withstand.

Radiant Warmer Dimensions; Viewed from Side, Arm Extended



Side view – dimensions in mm

Radiant Warmer Dimensions; Viewed from Front, Arm Folded



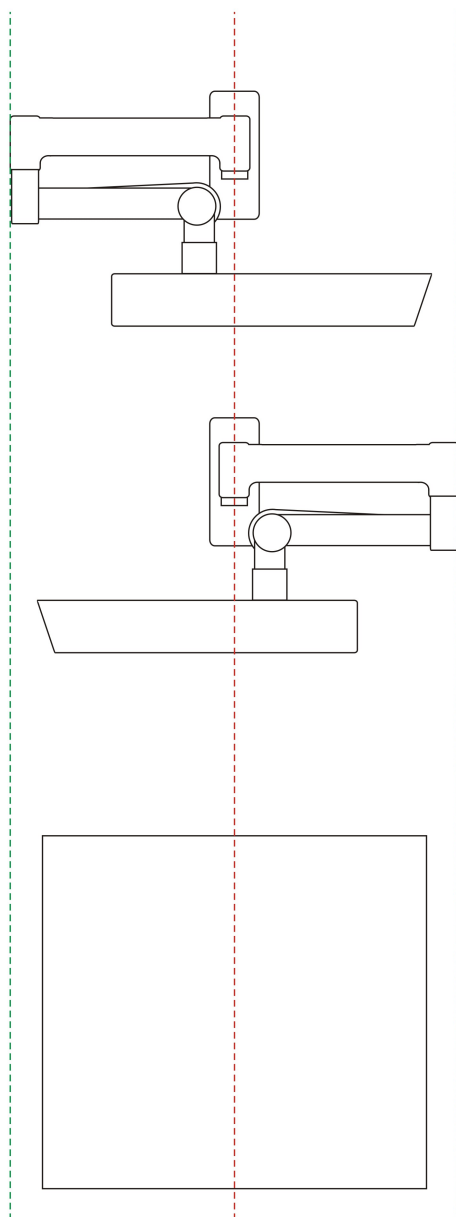
Front view – dimensions in mm

Positioning the Radiant Warmer

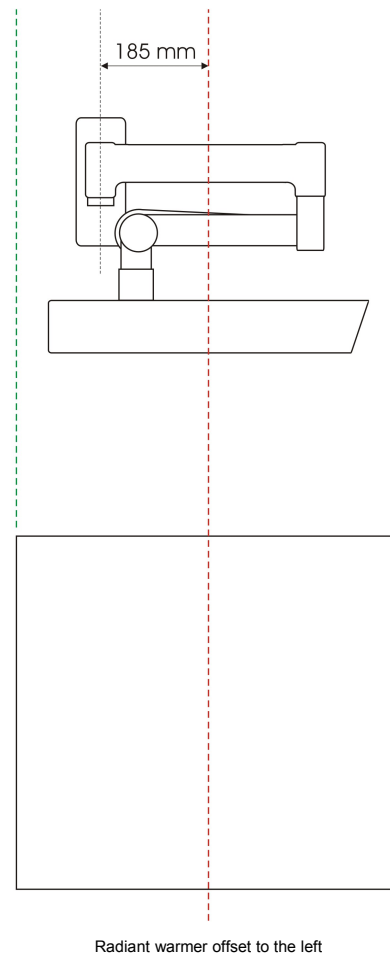
If the radiant warmer is positioned with the mounting bracket on the centre line of the cabinet, the arm can fold to either the left or the right (see below, left). When stowed away, the mounting arm will extend slightly wider than the cabinet body.

If space is an issue, for example when mounting the system within a cupboard or enclosure, the warmer can be positioned with the mounting bracket offset to the left, which keeps the mounting arm and head unit within the confines of the width of the cabinet body (see below right).

If positioning the radiant warmer with an offset, it is recommended to offset the mounting bracket 185 mm to the left of the centre line as the bed is to the left-hand side of the cabinet and this will offer better overhead positioning.



Radiant warmer mounted on the centre line



Radiant warmer offset to the left

Wall Bracket Mounting Instructions

Remove the plastic housing from the wall bracket.

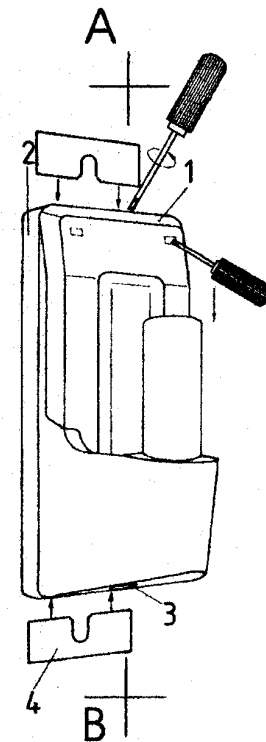
Mark the position of the mounting holes in a vertical line.

Secure the bracket to the wall using whatever means most suited to the wall construction.

If the wall is uneven place the spacer plate between the wall and the bracket.

Replace the plastic housing.

The bearing may have a protective plastic sheath, which must be removed before placement of the mounting arm onto the bearing.



Connecting the Mounting Plate to the Warmer

Using the 4 hex-bolts provided, connect the square mounting plate to the top of the radiant warmer so that the mains cable faces the rear of the warmer. The mains plug will now be in a position to be connected to the mains input socket of the warmer when required.

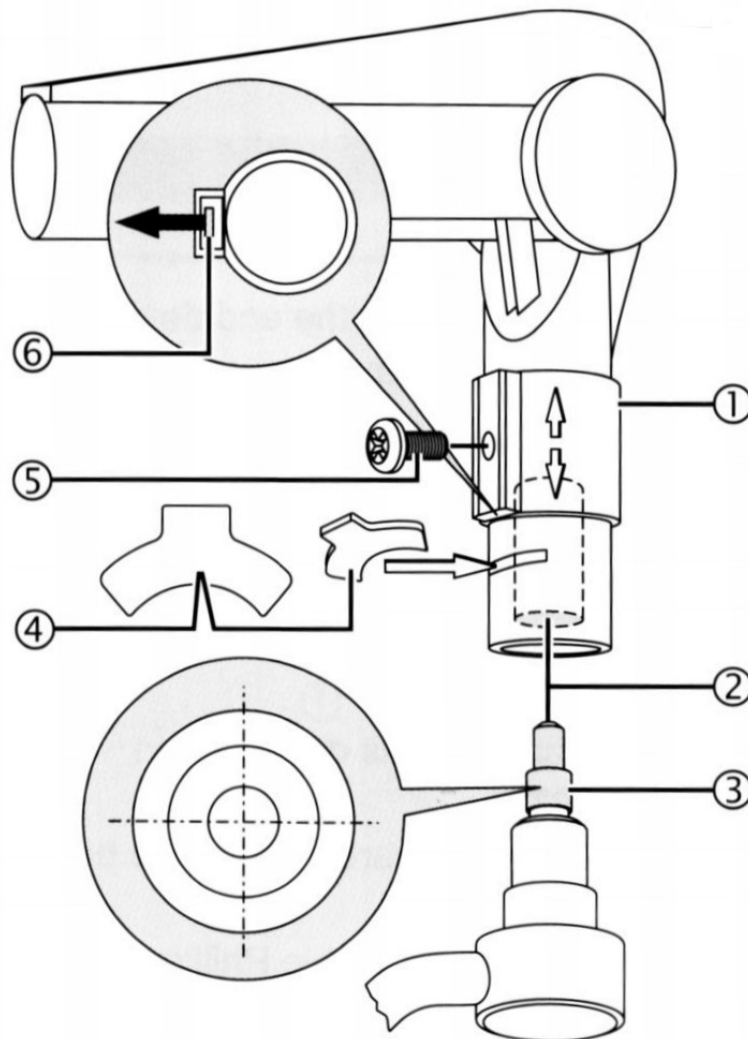
Mounting the Arm onto the Wall Bracket

Remove the protective sheath from the cylindrical bearing of the wall bracket; this sheath can be disposed of.

Carefully place the mounting arm onto the bearing and slide it down until it sits firmly on the wall bracket.

Note: there is no additional securing mechanism; the weight of the warmer and arm assembly is sufficient to provide safe, secure mounting.

Mounting Arm and Pivot



- (1) Sleeve
- (2) Assembly connection: between pivot and mounting arm
- (3) Pivot with 3-pole plug coupling
- (4) Securing segment
- (5) Sleeve securing screw
- (6) Sleeve retention

Connecting the Mounting Arm Assembly to the Warmer

Unscrew the sleeve securing screw (5) using a suitable Philips screwdriver, taking care not to lose the accompanying washer.

Using a suitable screwdriver, push the sleeve retention (6) outwards until it disengages and then push the sleeve (1) upwards.

Remove the securing segment using a suitable screwdriver; this allows the protective cap to be removed.

If it is not already greased, grease the pivot (3) using suitable roller bearing grease.

Position the warmer underneath the mounting arm and insert the pivot with the 3-pole plug coupling (3), keeping it straight, and then gently push upwards towards the mounting arm in order to establish the assembly connection (2).

Insert the securing segment (4); care should be taken to ensure that it fits into the concentric groove in the pivot.

Push down the sleeve (1) until it snaps securely into place. Once the sleeve has snapped into place, it should no longer be possible to move it upwards.



NOTE

There should be no appreciable gap between the mounting arm and the pivot where they meet. If a gap exists, check that the securing segment is correctly seated into the concentric groove in the pivot.



CAUTION

Continue to support the warmer until the sleeve has been clicked into place, failure to do so may result in damage to the warmer and personal injury.

Fasten the sleeve securing screw (5).

Check that the radiant warmer head unit is securely in place and is free to rotate.

Connect the system to the mains.

Perform function test.

Tom Thumb Infant Resuscitation Unit

The Tom Thumb (model TT490-15 3M) Infant Resuscitation Unit has a 3 m high-pressure oxygen hose with integral flowmeter, and requires a standard oxygen wall outlet or oxygen cylinder.



TT490-15 Tom Thumb Infant Resuscitation Unit With Flowmeter

The cabinet should be sited close enough to the oxygen supply to allow connection of the Tom Thumb.

The Tom Thumb is supplied with its own universal mounting clamp to allow it to be mounted onto one of the rails within the cabinet.

The Tom Thumb is also available in a configuration with a low-pressure tapered inlet and no flowmeter (model TT480).



TT480 Tom Thumb Infant Resuscitation Unit Without Flowmeter

The TT480 requires connecting to an existing flowmeter by using 10 mm low-pressure tubing, which needs to be cut to length during the commissioning of the cabinet system.

The flowmeter can be external to the cabinet, with the tubing entering the cabinet through one of the gas pipe access holes.

If the TT480 is to be connected to an air/oxygen blender, the blender is mounted inside the cabinet and low-pressure tubing is used to connect it to the Tom Thumb. See section entitled Commissioning Guidelines later in this manual for further guidance.

Low Suction Controller

The low suction controller requires a standard wall vacuum supply. The cabinet should be sited close enough to the vacuum supply to allow connection of the low suction controller.



Therapy Equipment Low Suction Controller

A rail clamp is attached to the rear of the low suction controller to allow it to be mounted onto one of the rails within the cabinet.

Suction Receiving System

The suction receiving jar is a reusable 1 Litre canister, containing a 1 Litre disposable liner, manufactured by Vacsax Ltd. The low suction controller connects to the suction receiving jar using 10 mm tubing.



Vacsax Suction Receiving System

The reusable canister has an integral V-mount adapter, which sits in a universal rail clamp with V-socket to allow it to be mounted onto one of the rails within the cabinet.

Optional reusable jars are available; these are supplied with a mounting cage with an attached rail clamp. See section entitled Consumables and Pats List for part numbers.

Air/Oxygen Blender

The Viamed Infant Resuscitation Cabinet may be used with a low flow air/oxygen blender, providing a model TT480 Tom Thumb is installed. The TT480 has a tapered input to connect via low-pressure tubing to the output flowmeter of an air/oxygen blender.

Viamed supply the Bio-Med Devices model 2003 low flow air/oxygen blender as an option, which can be mounted inside the resuscitation cabinet.



Bio-Med Devices model 2003 Low Flow Air/Oxygen Blender

Note: for cabinets supplied prior to 2009 the medirail sections may need to be replaced with longer lengths. Contact Viamed for further details.

Digital Apgar Timer

When supplied as part of a resuscitation cabinet system, the digital Apgar timer is supplied complete with a mounting clamp assembly to allow it to be mounted onto one of the rails within the cabinet. If ordering an Apgar timer individually, the mounting clamp assembly must be ordered separately: see section entitled Consumables and Parts List for part numbers.



Viamed Digital Apgar Timer

The timer operates from 4x AA/LR6/MN1500 1.5V alkaline batteries (supplied). To access the battery compartment, the mounting bracket assembly must first be removed: see the section entitled Commissioning Guidelines later in this manual for further guidance.

It should be noted that there is no On/Off switch on this device; instead the device enters Stand-by Mode after 60 minutes of operation.

To test the functionality of the Apgar timer, refer to the Operator's manual.

Storage Bins

Additional storage is provided by 3 storage bins, which can be hooked onto any of the fixed louvres on the rear wall of the cabinet.



Storage Bin

Additional bins are available: see section entitled Consumables and Parts List for the part number.

Bed & Mattress

Fixed to the inside of the resuscitation cabinet door is a bed, which provides a horizontal resuscitation platform when lowered.



Infant Resuscitation Bed with Mattress

The bed is designed with sides that angle outwards slightly, providing good access whilst also ensuring the safety of the patient.

The front edge of the bed has a lip, which angles up at 90 degrees to prevent the mattress from sliding forwards. The mattress sits on the bed with no need for further securing.

It is important to ensure that when the equipment is mounted within the cabinet, the door can close freely without the sides of the bed making contact with the equipment. See section entitled Commissioning Guidelines later in this manual for further guidance on the layout of the equipment.

Commissioning Guidelines

The following instructions are for the installation of the equipment to be contained within the cabinet. It is assumed that the cabinet and warmer are securely mounted at an appropriate height as per the instructions in this manual, and that all structural considerations have been taken into account, such as the strength of the wall, and that adequate fixings have been used.

Standard Configuration

The image below illustrates the layout of equipment for a cabinet in standard configuration with a TT90-15 (oxygen-only) Tom Thumb resuscitator.



Infant Resuscitation Cabinet in Standard Configuration



NOTE

If the system contains an air/oxygen blender please refer to the section Air/Oxygen Blender and Oxygen Monitor Configuration prior to proceeding, as the equipment layout will be different.

Cabinet Body

Ensure that a bed is mounted on the drop-down platform.

Ensure that a 'Caution' sticker is affixed to the platform.

Ensure 3 lengths of rail are mounted to the back of the cabinet on the pre-drilled rack to the left-hand side of the cabinet's rear wall.

Installing Low Suction Controller

Depending on the model of low suction controller, the vacuum hose may exit from the back of the device vertically upwards or downwards. For upward hoses: feed the probe end of the (yellow) vacuum hose down behind all 3 rails, centrally between the rail fixing points. For downward hoses: feed the probe end of the hose behind the middle and lower rails.

Feed the suction hose through the gas access slot in the cabinet base from the inside of the cabinet until the suction controller can be mounted onto the left-hand section of the top rail. The gas access slot is edged with a grommet strip, which prevents damage to the hose.

Ensure that the suction controller is mounted in such a way that the action of closing the door will not cause the side of the bed to make contact with the suction unit, and then secure the rail clamp.

Insert the probe into the wall vacuum supply and test the suction controller by turning it on, remembering to turn it off afterwards.

Installing TT490-15 Tom Thumb

If using a model TT490-15 Tom Thumb with built-in flowmeter, feed the probe end of the (white) oxygen hose down behind all 3 rails between the fixing points.

Feed the oxygen hose through the gas access slot in the cabinet base from the inside of the cabinet until the Tom Thumb can be mounted onto the right-hand section of the middle rail. The gas access slot is edged with a grommet strip, which prevents damage to the hose.

Ensure that the Tom Thumb is mounted in such a way that the action of closing the door will not cause the side of the bed to make contact with the Tom Thumb, and then secure the rail clamp.

Insert the probe into the oxygen supply and test the Tom Thumb by opening the flowmeter, remembering to turn it off afterwards. Note: further test and calibration procedures for the Tom Thumb are detailed in the Operator's Manual.

If using a model TT480 Tom Thumb, mount it onto the right-hand section of the middle rail. Ensure that the Tom Thumb is mounted in such a way that the action of closing the door will not cause the side of the bed to make contact with the Tom Thumb, and then secure the rail clamp.

Installing Vacsax Suction Receiving System

Attach a universal rail clamp with V-bracket onto the bottom rail, on the left hand side beneath the suction controller.

Mount the 1L Vacsax canister onto the V-bracket of the clamp.

Place the disposable liner into the canister and push down firmly. Ensure patient port is facing forwards for ease of connection.

Connect the Vacsax tapered suction connector into the vacuum port on the disposable liner (marked 'vacuum') with a twisting motion.

Cut a length of the clear 10 mm suction tubing so as to allow connection of the suction controller to the taper on the disposable liner without excessive coiling or being restrictively short, and connect these devices together.

Cut a length of the clear 10 mm suction tubing to approximately 90 cm: this is the patient tubing.

Connect the patient tubing firmly to the patient port on the disposable liner (marked 'patient') to ensure a good fit.

Note: if using a reusable jar system this will most likely need to be mounted directly onto the middle rail using a jar cage with an integral rail clamp, and the V-mount bracket will not be supplied.

Installing Apgar Timer

If the digital timer is not operating, remove the mounting bracket using a 3/16th inch Allen key, then using a narrow bladed screwdriver, release the battery cover. Insert 4x AA/LR6/MN1500 1.5 V alkaline batteries, observing the correct polarity, then replace the battery door and mounting bracket.

Place the timer on the right-hand side of the top rail.

Test the timer functions of Start, Freeze and Reset. Note: the timer cannot be turned off, instead it enters standby mode after 60 minutes, or can be put into standby mode by pressing the Reset button.

Installing Storage Bins

Place the storage bins onto the louvered rails on the right-hand side of the rear wall of the cabinet.

Installing Mattress

Place the mattress on the bed; if the mattress is wrapped in a plastic bag or film, ensure that this is removed prior to use.

Consumables

Place a Tom Thumb patient circuit, silicone adapter and mask into the cabinet; the shelf is an ideal place to store consumables. The bags need not be opened until the system is being prepared for use.

Operator's Manuals

Place the Operator's Manual for the resuscitation cabinet in the bottom of the cabinet beneath the storage bins for easy access by the operator.

Place the laminated Tom Thumb instruction cards over the adjustable valve of the Tom Thumb using the looped keychain provided with the instructions.

Final Checks

Ensure that the cabinet closes easily, without obstruction or trapping anything in the hinge of the door as it closes.



CAUTION

If any force is required to hold the door closed in order to secure the catches, it is likely that something is trapped, and forcing the cabinet closed in this way can lead to damage to the catches.

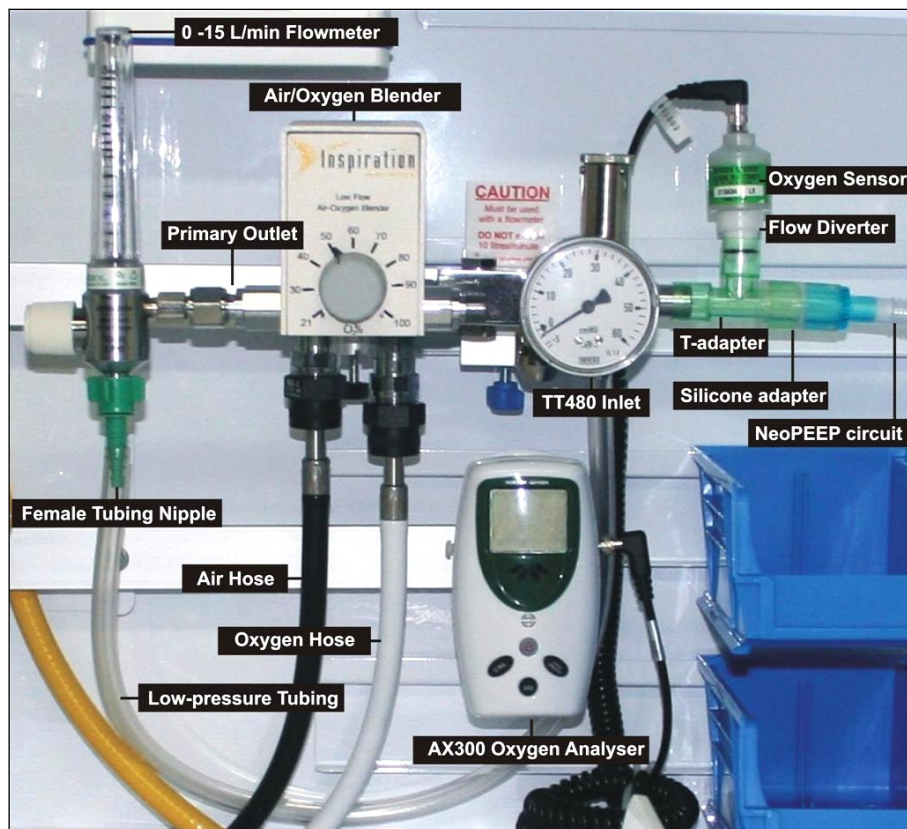
If it is felt that the trailing hoses are unsightly or causing an obstruction, large cable ties can be used to create loops as close to the base of the cabinet as possible. If these loops are of the right size, it is possible to conceal and secure them using the flange underneath the base of the cabinet to hold them in place.

Layout with Air/Oxygen Blender and Oxygen Analyser

If using an air/oxygen blender, the layout of equipment is slightly different. The image below illustrates the layout of equipment for a cabinet that contains a blender and oxygen analyser.



Infant Resuscitation Cabinet with a Low Flow Air/Oxygen Blender and Oxygen Analyser Installed



Equipment Layout and Interconnections

Installing Air/Oxygen Blender

Feed the probe end of the blender oxygen hose (white) through the gas access slot from the inside of the cabinet as far as it will go.

Feed the probe end of the blender air hose (black) through the gas access slot from the inside of the cabinet as far as it will go.

Mount the blender's mounting bracket onto the mid-section of the middle rail.

Fit the blender onto the mounting bracket.

Ensure that the blender is mounted in such a way that the action of closing the door will not cause the side of the bed to make contact with the Tom Thumb, and then secure the rail clamp.

Connect the air and oxygen hoses to the blender inlet ports and secure them by tightening the locking nuts.

Note: the air and oxygen connections are different and cannot be accidentally connected to the wrong ports.

Connect the 0 – 15 L/min flowmeter into the primary outlet of the blender, which on the Bio-Med Devices model 2003 is the outlet on the left of the device when looking from the front.

Connect the flowmeter female outlet nipple onto the flowmeter.

Installing TT480 Tom Thumb

Mount the TT480 Tom Thumb on the right-hand side of the middle rail.

Note: if not installing an oxygen analyser, the Tom Thumb can be mounting on the bottom rail if preferred.

Cut a suitable length of low-pressure tubing and connect it to the flowmeter outlet nipple, connect the other end to the inlet port of the TT480 Tom Thumb.

Note: depending upon the configuration of the TT480 Tom Thumb, the inlet port may be on the left of the instrument or underneath.

Installing Oxygen Analyser

If an air/oxygen blender is to be installed, the cabinet system may have been supplied with an optional oxygen analyser.

To install the oxygen analyser, attach a universal rail clamp with V-bracket onto the bottom rail, on the right-hand side beneath the Tom Thumb.

Ensure that batteries are installed in the oxygen analyser, and check the operation of the instrument as detailed in the Operator's Manual for that device.

Mount the oxygen analyser onto the V-bracket of the clamp.

Using the coiled sensor cable, connect the oxygen analyser to the oxygen sensor and tighten the locking nuts.

Connect the white flow diverter to the oxygen sensor using the integral screw threads.

Connect a T-adapter to the outlet of the Tom Thumb.

Push the oxygen sensor with flow diverter into the paediatric T-adapter.



Oxygen Sensor Connected to T-Adapter via a Flow Diverter

The patient circuit connects to the T-adapter using the silicone adapter.

Note: the bags for the silicone adapter, mask and patient circuit need not be opened until the system is being prepared for use.

Layout with Air/Oxygen Blender without Oxygen Analyser

If using an air/oxygen blender without an oxygen analyser, the layout of equipment is slightly different.

The image below illustrates the layout of equipment for a cabinet that contains a blender.

- The suction controller is situated to the left of the top rail.
- The Apgar timer is situated to the right of the top rail.
- The air/oxygen blender is situated right of centre on the middle rail.
- The suction-receiving jar is situated on the left of the bottom rail.
- Tom Thumb is situated to the right of the blender on the middle rail, or if preferred, can be sited to the right of the bottom rail.



Infant Resuscitation Cabinet with a Low Flow Air/Oxygen Blender Installed

Consumables And Parts List

Note: the Viamed resuscitation cabinet is available in different configurations, the parts list contains equipment from all variants; care must be taken when re-ordering replacement parts. If in doubt, please contact Viamed to determine the correct item.

Parts	
Part no.	Description
0310002	Complete resuscitation cabinet including all parts
0310302	Wall mounted radiant warmer
0330120	Element for radiant warmer – 600 W ceramic
0330105	Cabinet body with shelf and medirail
0332100	Resuscitation cabinet door catch (single)
0320021	Resuscitation bed, 35 cm (14”) wide
0320043	Mattress, 35 cm (14”) wide
0310035	Low suction controller (Oxylitre S714)
0330040	Suction hose assembly, 3 m (Oxylitre)
0310037	Low suction controller (Therapy Equipment 4725-3M)
0330033	Suction hose assembly, 3 m (Therapy Equipment)
3833-132	VacSax reusable suction canister
3833-007	VacSax tapered suction connectors (pack/10)
9910-340	VacSax disposable liners (box/25)
0320010	Universal rail clamp with ‘V’ for mounting Vacsax suction jar
0310100	Apgar Timer (note: mounting bracket sold separately)
0320200	Mounting bracket with rail clamp for mounting Apgar timer
0310020	Size 3 storage box
0310030	Tom Thumb resuscitation unit, type TT480 without flowmeter
0310034	Tom Thumb resuscitation unit, type TT490-15-3M with flowmeter
0330218	Oxygen hose assembly for Tom Thumb, 3 m
0310200	Low-flow air/oxygen blender including flowmeter, hoses and mounting bracket
0310201	Low-flow air/oxygen blender (blender only, no accessories)
0320210	Flowmeter, 0 – 15 L/min
0320214	Rail mount bracket for air/oxygen blender
0320216	NIST hose with MKIV oxygen probe, 3 m
0320217	NIST hose with MKIV air probe, 3 m

Consumables	
Part no.	Description
0310104	Filter for Oxylitre low suction controller, single unit
0310105	Filters for Oxylitre low suction controller, box of 30
0310109	Filter for Therapy Equipment low suction controller, single unit
0310110	Filters for Therapy Equipment low suction controller, box of 10
0330035	Suction clear tubing, 1 m
3210011	NeoPEEP circuit with variable PEEP, single patient use (without mask)
3210070	Single use silicone face mask, size 00
3210071	Single use silicone face mask, size 01
0120140	Silicone adapter for connecting NeoPEEP circuit to Tom Thumb
0120103	Paediatric T-adapter, 15 mm I.D. to 15 mm O.D. with 15 mm I.D. port <small>Note: only required if connecting an oxygen analyser into the patient circuit</small>
0332000	Annual service kit for model 2003 blender
0332001	Overhaul kit for model 2003 blender – includes annual service kit
Operator and Service Manuals	
Part no.	Description
0391045	Resuscitation cabinet operator's manual
0391050	Resuscitation cabinet installation manual
0390007	Tom Thumb TT490-15 operating instruction card
0390006	Tom Thumb TT480 operating instruction card
0390022	TT480 service manual
0390023	TT490-15 service manual
0390021	Tom Thumb valves service manual (common to all Tom Thumb variants)
2122	Bio-Med Devices Air Oxygen blender operator's manual

Warranty

All parts of the Viamed wall mounted infant resuscitation cabinet system are guaranteed for a period of 12 months from the date of purchase.

The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before dispatch.

This warranty covers defects in materials and manufacture but excludes damage caused by accident, misuse or neglect.

Should a component develop a defect within the warranty period, it will be repaired or replaced at Viamed's discretion.

In the event of warranty claims or queries regarding this product when purchased outside the UK, please contact your local distributor.

Company Details

All products are CE marked to the requirements of MDD 93/42 EEC and are supplied in accordance with our quality system accreditations:
BS EN ISO 9001/2000 and ISO 13485/2003.

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