# Dräger



D-21865-2020

Pocket Guide Evita<sup>®</sup> Infinity V500

Software version 2.n

Dräger. Technology for Life®

### Content

System overview	04
Operating concept	
Getting started	12
Operation	
Alarms	20
Monitoring	22

The Evita<sup>®</sup> Infinity V500 Pocket Guide is not a replacement or substitute for the Instructions for Use. It is for informational purposes only. Any use of the device requires full understanding and strict observation of the Instruction for Use.

The availability of functionality depends on the country and availability. Options may not be included in a present device or may come at extra costs.

The pocket guide may not reflect the latest software version of the device.

### Intended use

#### Evita V500 ventilation unit

The Evita V500 ventilation unit of the Infinity Acute Care System is intended for the ventilation of adults, paediatric patients and neonates. Evita V500 provides mandatory ventilation modes and ventilation modes for supporting spontaneous breathing and also airway monitoring. The Evita V500 ventilation unit is used with Dräger Infinity C Series Medical Cockpits. The Evita V500 ventilation unit is intended for use in different medical care areas.

#### Infinity Medical Cockpit C700

Medical Cockpits are intended to be used to monitor waveforms, parameter information, and alarms as well as to control settings. The Infinity Series Medical Cockpits are intended to be used in environments where patient care is provided by trained healthcare professionals.

#### **Intensive care Ventilator**



Evita® Infinity V500

### **Cockpit Front Panel**



### **Cockpit Back Panel**



### Ventilation unit, front panel



#### Main screen



### Main screen



#### **Alarm priorities**

A certain priority, indicating the urgency, is assigned to each alarm. The following table shows the differences between the alarm priorities with respect to identification and the action required.

Colour	Alarm priority	Action required
Red	High !!!	Immediate action is necessary in order to avert an acute danger
Yellow	Medium !!	Prompt action is necessary in order to avert a danger
Turquoise	Low !	Attention is necessary, but a delayed response is sufficient



#### Touch – Turn – Confirm

#### Selecting and setting parameters and functions

#### Touch

#### Turn

the control element. The control element turns yellow. the rotary knob to the right or to the left to make the setting. The value is displayed in the control element.

#### Confirm

by pressing the rotary knob. The setting is applied, and the control element turns grey or blue again.







### Switching on Evita V500 and Infinity C500

#### Prerequisites:

- Evita V500, Infinity C500, PS500 and GS500 are reprocessed and assembled
- The mains power supply and the gas supply are connected.
- The Evita V500 toggle switch is set to **On**.

Ventilation unit, left side: \_\_\_\_\_ Toggle switch



 Press the key on Infinity C500. The system is started. The start dialog is displayed.

Evita V500 provides you with two options

- Use settings of previous patient or
- Admit new patient
- If the Start dialog is closed using the X button, Evita V500 adopts the settings of the previous patient.



#### Selecting the breathing circuit and the breathing gas humidifier

- 1. Touch the **Start/ Standby** ... button in the main menu bar.
- 2. Touch the **Br. circuit/** Humidifier tab.
- 3. Touch the button  $\mathbf{\nabla}$ .
- Select the breathing circuit used from the selection list. If the breathing circuit used is not included in the selection list select **Other** from the selection list.
- 5. Confirm with the rotary knob.
- 5. Select the Humidification type.



#### Performing the device check

The system check is only possible in standby mode.

- 1. Touch the **Start/ Standby** ... button in the main menu bar.
- 2. Touch the System check tab.
- 3. Touch the Device check tab.
- 4. Touch the Start button.
- 5. Confirm with the rotary knob.
- The questions must be answered by touching the Yes or No buttons. The Next test button can be used to skip the test steps.



### Performing the breathing circuit check

After the device check the user is requested to perform the **check of the breathing circuit**.

Prerequisite: The **System check** page is opened.

- 1. Touch the **Breathing circ. check** tab.
- 2. Touch the Start button.
- 3. Confirm with the rotary knob.
- 4. When requested by Evita V500 in the instruction field: Seal the patient connection port, e.g., with a sterile glove.
- 5. Confirm with OK.
- 6. When requested, open the patient connection port and confirm with **OK**.

### Selecting a patient

#### Admitting a new patient

For a new patient, Evita V500 determines the ventilation parameters' start up settings based on the **patient category** or the **body weight** Ventilation parameter startup settings by body **height/body weight**.

Prerequisite: The Weight function was configured and a new patient was admitted.

- Touch the button for the body height (In the Adult and Ped. pat. patient categories only).
- 2. Set the body height by turning the **rotary knob** and push to confirm.





### **Setting ventilation**

## Ventilation parameter start-up settings by patient category

The **Start/Standby** page contains the buttons for the patient category:

- New Adult
- New Ped. pat.
- New Neo.
- 1. Touch the button for the desired **patient category**.
- 2. Confirm with the rotary knob.



In the **Neo. patient category**, the patient's body weight is set directly. The **Start/Standby** page contains the button for this start up body weight.

- 1. Touch the button for the start up **body weight**.
- 2. Using the **rotary knob**, set the start up body weight and confirm the value.

The button for the current body weight is displayed. After the patient has been admitted, the current body weight corresponds to the start up body weight.



### Selecting the Tube or NIV application mode

Evita V500 can switch between **non-invasive ventilation** and **tube ventilation**.

The application mode can only be selected in standby mode.

- 1. Touch the **Start/ Standby** ... button in the main menu bar.
- 2. Touch the Tube/NIV tab.
- 3. Touch the Tube or NIV button.
- 4. Confirm with the rotary knob.

Observe the information on changing the application mode!



### Selecting the therapy type

Evita V500 can choose between therapy types Ventilation and  $O_2$  therapy.

The therapy type can only be changed in standby mode.

- 1. Touch the **Start/ Standby** ... button in the main menu bar.
- 2. The Start/Standby page is displayed.
- Touch the Ventilation or the O<sub>2</sub> Therapy button.
- 4. Confirm with the rotary knob.



## Operation

### **Setting ventilation**

## Opening the Ventilation settings dialog window.

The **Ventilation settings** dialog window can be opened as follows:

- Touch the Ventilation settings ... button in the main menu bar. or
- Touch the f button in the therapy bar. or
- 3. Touch the **displayed ventilation mode** in the header bar.



#### Selecting ventilation modes

The **Ventilation settings** dialog window contains tabs for selecting the ventilation modes.

- 1. 4 tabs have ventilation modes permanently assigned to them.
- 2. The **Other modes** tab can be used to select another ventilation mode, which can be selected from the available ventilation modes.



## Operation

#### Setting ventilation parameters

- 1. Prerequisite: The **General settings** page is opened.
- 2. Touch the corresponding **therapy control**, e.g., RR. The colour turns yellow.
- 3. Set the value by turning the **rotary knob** and push to confirm.
- 4. Information is displayed in the message field, e.g., when the setting limit of a parameter has been reached.



### Additional settings for ventilation

The ventilation modes can be combined with **additional settings** to optimize ventilation.

- 1. Touch the Additional settings tab.
- 2. Touch the tab of the **respective** additional setting.
- 3. Use the **buttons** to activate or deactivate the additional setting.
- 4. Touch the corresponding **therapy control**.
- 5. Set the value by turning the **rotary knob** and push to confirm.



## Operation

### Switching on O<sub>2</sub> Therapy

 O<sub>2</sub> therapy can only be switched on in standby mode. Touch the **Start/ Standby** ... button in the main menu bar.

Evita V500 opens the Start/Standby dialog window.

2. Touch the **Standby** button and confirm with the **rotary knob**.

Evita V500 is in standby mode.

 Touch the O<sub>2</sub> Therapy button. The message field displays the information to use specific masks for O<sub>2</sub> therapy.

Connect the mask for the O2 therapy. Touch the **Start** ventilation button and confirm with the **rotary knob**.

 $O_2$  therapy is switched on. Evita V500 displays the main screen with the **therapy bar for O**<sub>2</sub> **therapy**. The message  $O_2$  **Therapy** is displayed in the header bar.

### **Ending operation**

- 1. Switch Evita V500 to standby mode: Touch the **Start/ Standby** ... button in the main menu bar.
- 2. Touch the **Standby** button and confirm with the **rotary knob**.
- 3. Press the key on Infinity C500.

Evita V500 opens the **Shut down** device dialog. Touch the **OK** button and confirm with the **rotary knob**.

Evita V500 ends operation.





## Alarms





#### **Display of alarms – Acoustic alarm signals**



Evita V500 generates different alarm tone sequences to indicate alarms acoustically. The acoustic alarm signal can be suppressed for 2 minutes maximum.

1. Press the **audio silence** key.

### Alarms

### **Displaying current alarms**

To display the current alarms, proceed as follows:

- Touch the alarm message in the header bar. Or
- 2. Touch the **Alarms** ... button in the main menu bar.
- 3. Touch the Current alarms tab.

Acknowledging all alarm messages that are no longer active:

- 4. Touch the Reset all button.
- 5. Confirm with the rotary knob.



### Setting alarm limits

- Touch the Alarms ... button in the main menu bar. The Limits page appears by default.
- 2. Touch the **corresponding button** for the upper or lower alarm limit.
- 3. Set the value by turning the **rotary knob** and push to confirm.



### Monitoring

### Installing the CO<sub>2</sub> sensor and CO<sub>2</sub> cuvette

- Insert the plug of the CO<sub>2</sub> sensor into the socket at the rear of the ventilation unit.
- 2. Insert the cuvette into the patient port of the Y-piece.
- The cuvette windows are facing to the side. Position the cuvette vertically to avoid condensate accumulation.
- Place the CO<sub>2</sub> sensor onto the cuvette. The cable is facing towards the device.





### Monitoring

### Performing a CO<sub>2</sub> zero calibration

**Zero calibration** is performed in ambient air and with a clean  $CO_2$  sensor which is removed from the cuvette. Prerequisite: Evita V500 is switched on and at least the three minute warm up phase for the  $CO_2$  sensor has elapsed. After 3 minutes, the measured  $CO_2$  values will be inside the specified tolerance range.

#### Starting zero calibration

- 1. Touch the **Sensors/ Parameters** ... button in the main menu bar.
- 2. Touch the  $CO_2$  sensor tab.
- 3. The **Zero calib. on/off** page appears by default.
- 4. Touch the Start button.

When requested by Evita V500:

- Remove the CO<sub>2</sub> sensor from the cuvette.
- Confirm with the rotary knob.

Evita V500 performs the zero calibration and displays the message **Calibration in progress**.

After approximately 5 seconds, Evita V500 reports: **Zero calibration successful**.

Fit the CO<sub>2</sub> sensor back on the cuvette.



Not all products, features, or services are for sale in all countries. Mentioned Trademarks are only registered in certain countries and not necessarily in the country in which this material is released. Go to www.draeger.com/trademarks to find the current status.

CORPORATE HEADQUARTERS Drägerwerk AG & Co. KGaA Moislinger Allee 53–55 23558 Lübeck, Germany

www.draeger.com

#### Manufacturer:

Drägerwerk AG & Co. KGaA Moislinger Allee 53–55 23542 Lübeck, Germany

Locate your Regional Sales Representative at: www.draeger.com/contact



#### REGION EUROPE

Drägerwerk AG & Co. KGaA Moislinger Allee 53–55 23558 Lübeck, Germany Tel +49 451 882 0 Fax +49 451 882 2080 info@draeger.com

REGION MIDDLE EAST, AFRICA Drägerwerk AG & Co. KGaA Branch Office P.O. Box 505108 Dubai, United Arab Emirates Tel +971 4 4294 600 Fax +971 4 4294 699 contactuae@draeger.com

#### REGION ASIA PACIFIC

Draeger Singapore Pte. Ltd. 61 Science Park Road The Galen #04-01 Singapore 117525 Tel +65 6872 9288 Fax +65 6259 0398 asia.pacific@draeger.com

#### REGION CENTRAL AND SOUTH AMERICA

Dräger Indústria e Comércio Ltda. Al. Pucurui - 51 - Tamboré 06460-100 - Barueri - São Paulo Tel. +55 (11) 4689-4900 relacionamento@draeger.com