Dräger Evita® V800
ICU Ventilation and Respiratory Monitoring

Experience the next level of ventilator operation. The Evita® V800 combines high performance ventilation with an aesthetic design enabling quick and efficient operation. From the first onset of a lung protective ventilation until the integration of a patient care-centred intensive care workplace.

Evita V800

Dräger. Technology for Life®

Benefits

Operation principle and user interface

The brilliant user interface combined with up-to-date glass touch technology supports intuitive operation.

- Quick and safe to operate even in the most stressful situations due to intuitive menu access to both settings and your clinical data.
- All patient data, alarms and trends are fully recorded. Conveniently exported via USB interface.
- Switch between multiple view configurations with the touch of a finger.
- Step-by-step guidance leads you through every procedure.
- Easy to read and navigate thanks to our new colour concept and glass touch display.
- The 360° alarm light flashes in the color of the corresponding alarm priority and is visible from every direction.

Early Mobilization and Patient Transport

Support of instant, flexible patient transport through optional hardware components and early mobilization.

- Gas supply unit GS500
- Power supply unit PS500
- Bed Coupling
- Transport supply unit TSU

Lung Protective Ventilation

Our comprehensive treatment tools help support your lung protective ventilation strategy.

- Lung protective ventilation for adults, children and neonates: invasive, non-invasive and with O_2-therapy
- Advanced lung monitoring and diagnostic features (e.g. Smart Pulmonary View or Low Flow manoeuvre)
- Display of regional ventilation distribution with PulmoVista® 500
- Recruitment tools (e.g. QuickSet® and PressureLink) and therapy decision support with breath-by-breath trends (PEEP, EIP, Vt, C_{dyn})
- Focus on end-expiratory lung volume with PC-APRV with AutoRelease®
- Volumetric CO_2-Monitoring (VCO_2, $VTCO_2$, Slope Phase 3, Vds/VTe)

Benefits

Effective Weaning

Support of a synchronized way for quick and efficient weaning.

- Increased variability in spontaneous breathing through Variable Pressure Support or Proportional Pressure Support
- Facilitating spontaneous breathing through “room to breathe concept” with e.g. AutoFlow® or Volume Guarantee
- Automatic tube compensation (ATC®) compensates for artificial airway resistance
- Assessment of weaning through RSBi, P0.1 and NIF

Connectivity

We envision a future of acute care where medical devices are connected as a system. Interoperability between different devices can help to avoid preventable medical errors and potentially serious inefficiencies. The new standardised network protocol named SDC makes the safe and dynamic connectivity in the hospital possible which will allow interoperability of medical devices in the future.

Our first step will be connectivity through CC300:

- Full HL7 data export to HIS: reliability exchange high-quality data in a standardised format between medical devices and EMR.
- Future-proof open connectivity: standardised and secure communication between medical devices with a high level of cyber security.

Comprehensive Services

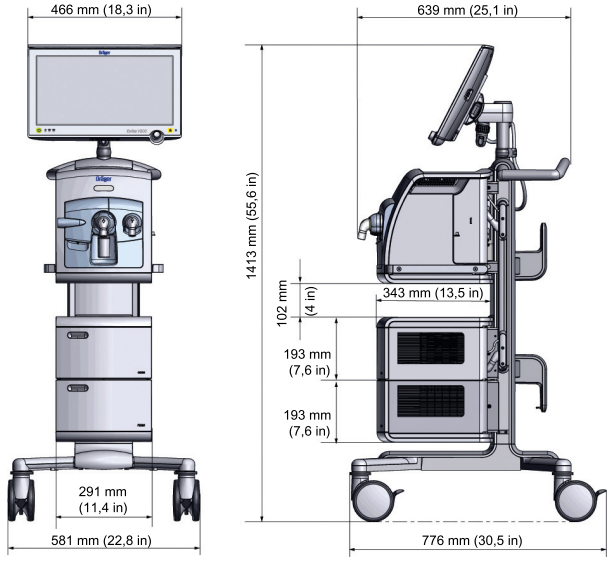
Comprehensive Services encompasses a wide range of service solutions prior, during and after the installation of your purchased units.

- Product Service: i.e. device maintenance
- Professional Service: e.g. IT consulting and system integration
- Training on our products and services: e.g. application training
- Multivendor Service: maintenance for your entire medical equipment regardless of the manufacturer
- Digital Services: e.g. network-based services and analysis of device data

Awards

DESIGN AWARD 2020

Physical Specifications



Designation	Weight
Ventilation unit	approx. 16 kg (34.9 lbs)
Display unit	7 kg (15.4 lbs)
Ventilation unit and display unit	approx. 23 kg (50.7 lbs)
Trolley	approx. 33 kg (72.8 lbs)
PS500	approx. 16 kg (35.2 lbs)
GS500	approx. 10.5 kg (23 lbs)
Nominal weight (weight of the ventilation unit and display unit on trolley)	58 kg (128 lbs)
Maximum weight (permitted maximum total weight)	133 kg (293 lbs)

Dimensions and weights of the Evita V800

Accessories

D-3491-2019

Ventilation Accessories

Day in, day out in the hospital you are faced with enormous time and cost pressures at the same time you are taking care of the welfare of your patients. You need technical medical accessories which you can use to unlock the full potential of your equipment, which work smoothly, ensure the best possible care of your patients and help you to improve your processes. In short: accessories you can rely on, Dräger can supply it for you. Find them in our accessory catalogue.

Related Products

D-25283-2009

Dräger PulmoVista® 500

Making ventilation visible. Put the power of Electrical Impedance Tomography (EIT) to work for you and your patients. With the PulmoVista® 500, you can visualise regional ventilation distribution within the lungs – non-invasive, in real time and directly at bedside.

Related Products

D-6036-2018

Connectivity Converter CC300

Sharing information amongst medical devices, and with clinical information systems, increases the efficiency of acute care delivery. The Connectivity Converter CC300 enables Dräger point-of-care devices to communicate with one another and with systems along the hospital's existing clinical network.

Technical Data

Patient type	Adults, paediatric patients, neonates
Ventilation settings	
Ventilation mode	Volume controlled ventilation: – VC-CMV – VC-SIMV – VC-AC – VC-MMV
	Pressure controlled ventilation: – PC-CMV – PC-BIPAP[1] / SIMV+ – PC-SIMV – PC-AC – PC-APRV – PC-PSV
	Support of spontaneous breathing: – SPN-CPAP/PS – SPN-CPAP/VS – SPN-CPAP – SPN-PPS
Enhancements	– AutoFlow® / Volume Guarantee – Variable Pressure Support – Smart Pulmonary View – Automatic Tube Compensation (ATC®) – Low Flow PV Loop
Special procedures	– Suction manoeuvre – Manual inspiration/hold – Medication nebulisation – P0.1 – PEEPi – NIF
Therapy types	– Invasive ventilation (Tube) – Non-invasive ventilation (NIV) – O_2-therapy
Respiratory rate (RR)	Adult 0.5 to 98/min Paediatric patients, Neonates 0.5 to 150/min
Inspiratory time (Ti)	Adults 0.11 to 10 s Paediatric patients, Neonates 0.1 to 10 s
Tidal volume (VT)	Adults 0.1 to 3.0 L Paediatric patients 0.02 to 0.3 L Neonates 0.002 to 0.1 L
Inspiratory flow (Flow)	Adults 2 to 120 L/min Paediatric patients 2 to 30 L/min
Maximum flow during non-invasive ventilation of neonates (Flow max)	0 to 30 L/min
Inspiratory pressure (Pinsp)	1 to 95 mbar (or hPa or cmH_2O)
Pressure limitation (Pmax)	2 to 100 mbar (or hPa or cmH_2O)
Positive end-expiratory pressure (PEEP)	0 to 50 mbar (or hPa or cmH_2O)
Additional intermittent PEEP for sighs (ΔintPEEP)	0 to 20 mbar (or hPa or cmH_2O)

Technical Data

Pressure support (Psupp)	0 to 95 mbar (or hPa or cmH_2O)
Pressure rise time (Slope)	Adults, Paediatric patients 0 to 2 s Neonates 0 to 1.5 s
O_2 concentration (FiO_2)	21 to 100 Vol.%
Trigger threshold (Flow trigger)	0.2 to 15 L/min
Automatic Tube Compensation (ATC®)	Inside tube diameter tube Ø – Endotracheal tube ET Adults 5 to 12 mm (0.2 to 0.47 inch) Paediatric patients 2 to 8 mm (0.08 to 0.31 inch) Neonates 2 to 5 mm (0.08 to 0.2 inch) – Tracheostoma tube (Trach.) Adults 5 to 12 mm (0.2 to 0.47 inch) Paediatric patients 2.5 to 8 mm (0.1 to 0.31 inch) – Degree of compensation 0 to 100 %

Airway Pressure Release Ventilation (APRV)

Inspiratory time (Thigh)	0.1 to 30 s
Expiratory time (Tlow)	0.05 to 30 s
Maximum duration of lower pressure level (Tlow max)	0.05 to 30 s
Upper pressure level (Phigh)	1 to 95 mbar (or hPa or cmH_2O)
Lower pressure level (Plow)	0 to 50 mbar (or hPa or cmH_2O)
Expiration termination criterion (in relation to the peak expiratory flow) (Exp. term.)	1 to 80 % (PEF)

Proportional Pressure Support (SPN-PPS)	
Flow-based assistance (Flow Assist)	Adults 0 to 30 mbar/L/s (or hPa/L/s or cmH_2O/L/s) Paediatric patients 0 to 100 mbar/L/s (or hPa/L/s or cmH_2O/L/s) Neonates 0 to 300 mbar/L/s (or hPa/L/s or cmH_2O/L/s)
Volume-based assistance (Vol. Assist)	Adults 0 to 100 mbar/L (or hPa/L or cmH_2O/L)
corresponds to compliance compensation	10000 to 10 mL/mbar (or mL/hPa or mL/cmH_2O) Paediatric patients 0 to 1000 mbar/L (or hPa/L or cmH_2O/L)
corresponds to compliance compensation	10000 to 1 mL/mbar (or mL/hPa or mL/cmH_2O) Neonates 0 to 4000 mbar/L (or hPa/L or cmH_2O/L)
corresponds to compliance compensation	1000 to 0.3 mL/mbar (or mL/hPa or mL/cmH_2O)
O_2-therapy	Continuous Flow 2 to 50 L/min, BTPS O_2 concentration FiO_2 21 to 100 Vol%
Leakage compensation	On/Off On: full compensation active Off: only trigger compensation active

Displayed measured values

Airway pressure measurement	Plateau pressure (Pplat) Positive end-expiratory pressure (PEEP) Peak Inspiratory Pressure (PIP) Mean airway pressure (Pmean) Minimum airway pressure (Pmin) Range -60 to 120 mbar (or hPa or cmH_2O)

Technical Data

Flow Measurement	
Minute volume measurement	Expiratory minute volume, overall, not leakage-corrected (MVe) Inspiratory minute volume, overall, not leakage-corrected (MVi) Minute volume, leakage-corrected (MV) Mandatory expiratory minute volume, overall, not leakage-corrected (MVemand) Spontaneous expiratory minute volume, overall, not leakage-corrected (MVespon) Range 0 to 99 L/min BTPS
Tidal volume measurement	Tidal Volume, leakage-corrected (VT) Mandatory inspiratory tidal volume, not leakage-corrected (VTimand) Mandatory expiratory tidal volume, not leakage-corrected (VTemand) Spontaneous inspiratory tidal volume, not leakage-corrected (VTispon) Range 0 to 5500 mL BTPS
Respiratory rate measurement	Respiratory rate (RR) Mandatory respiratory rate (RRmand) Spontaneous respiratory rate (RRspon) Range 0/min to 300/min
O_2 measurement (inspiratory side)	Inspiratory O_2 concentration (in dry air) (FiO_2) Range 18 to 100 Vol%
CO_2 measurement in main flow (adults and paediatric patients only)	End-tidal CO_2 concentration ($etCO_2$) Range 0 to 100 mmHg

Displayed calculated values	
Dynamic compliance (Cdyn)	Range 0 to 650 mL/mbar (or mL/hPa or mL/cmH_2O)
Resistance (R)	Range 0 to 1000 mbar/L/s (or hPa/L/s or cmH_2O/L/s)
Leakage minute volume (MVleak)	Range 0 to 99 L/min, BTPS
Rapid shallow breathing index (RSBI)	Adults 0 to 9999 (/min/L) Paediatric patients 0 to 9999 (/min/L) Neonates 0 to 300 (/min/L)
Negative Inspiratory Force (NIF)	Range -80 mbar to 0 mbar (or hPa or cmH_2O)
Occlusion pressure P0.1	Range 0 to -25 mbar (or hPa or cmH_2O)
Waveform displays	Airway pressure Paw (t) -30 to 100 mbar (or hPa or cmH_2O) Flow (t) -180 to 180 L/min Volume V (t) 2 to 3000 mL CO_2 (t) 0 to 100 mmHg

Alarms / Monitoring	
Expiratory minute volume (MVe)	High / Low
Airway pressure (Paw)	High
Inspiratory O_2 concentration (FiO_2)	High / Low
End-tidal CO_2 concentration ($etCO_2$)	High / Low
Respiratory rate (RR)	High
Volume monitoring (VT)	High / Low
Apnoea alarm time (Tapn)	5 to 60 seconds, Off

Technical Data

Disconnection alarm time (Tdiscon)	0 to 60 seconds
Performance data	
Control principle	Time-cycled, volume-constant, pressure-controlled
Length of intermittent PEEP	1 to 20 expiratory cycles
Medication nebulisation	For 5, 10, 15, 30 minutes, continuously (∞)
Inspiratory flow	Max. 180 L/min, BTPS
Base flow, adults	2 L/min
Base flow, paediatric patients	3 L/min
Base flow, neonates	6 L/min
Inspiratory valve	Opens if medical compressed air supply fails (supply gas flow is not sufficient to provide the inspiratory flow required), enables spontaneous breathing with ambient air.
Endotracheal suction	
Disconnection detection	Automatic
Reconnection detection	Automatic
Preoxygenation	Max. 3 minutes
Active suction phase	Max. 2 minutes
Postoxygenation	Max. 2 minutes
Factor for paediatric patients and neonates	1 to 2
Supply system for spontaneous breathing and Psupp	Adaptive CPAP system with high initial flow
Operating data	
Mains power supply	
Electric power inlet	100 V to 240 V, 50/60 Hz
Current consumption	
At 230 V	Max. 1.3 A
At 100 V	Max. 3.0 A
Inrush current	Approx. 8 to 24 A peak Approx. 6 to 17 A quasi RMS
Power consumption	
Maximum	300 W
During ventilation, without charging the battery	Approx. 100 W ventilation unit with display unit Approx. 180 W with GS500
Gas supply	
O_2 positive operating pressure	2.7 to 6.0 bar (or 270 to 600 kPa or 39 to 87 psi)
Air operating pressure	2.7 to 6.0 bar (or 270 to 600 kPa or 39 to 87 psi)
Battery details	
Internal battery of ventilation unit (without PS500)	Type NiMH battery, sealed
Battery runtime	Without GS500 30 minutes With GS500 15 minutes
Batteries in the PS500 power supply unit	Type LFP batteries
Battery runtime	Without GS500 240 minutes With GS500 120 minutes
Automatic switch over from internal to external battery	
Battery test available	
The battery runtime applies when the batteries are fully charged and new and ventilation is typical.	

Technical Data

Screen values	
Evita V800 diagonal screen size	18.3 inches
Input / Output ports	– 3 external RS232 (9-pin) connectors – 4 USB ports for data collection – 1 LAN port
Touchscreen technology	Capacitive touchscreen with glass front
Aspect ratio	16:9
Resolution	1366 x 768 pixels
Digital machine output	Digital output and input via an RS232 C interface Dräger MEDIBUS® and MEDIBUS®.X

[1] BIPAP, trademark used under license. ATC®, trademarked by Dräger. AutoFlow®, trademarked by Dräger.

BTPS – Body Temperature Pressure Saturated. Measured values relating to the conditions of the patient lung 37° C (98.6° F), steam-saturated gas, ambient pressure.

1 mbar = 100 Pa

Some functionalities are available as an option.

Notes

Not all products, features, or services are for sale in all countries.
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91.07.066 | 22.5.24 | DS | JA | Subject to modifications | © 2020 Drägerwerk AG & Co. KGaA

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