GE/Datex-Ohmeda Aestiva®/5

Una sistema para la entrega de anestesia

Equipo para la manera en que usted opera

Ventilacion de la cual se puede depender con un diseno facil de manejar

Destaca el ventilador "smart vent" (ventilador intelligente)

El ventilador "Smart Vent" es facil de manejar, ofrece modos de presion y volumen y puede ventilar pacientes neonatales, trauma y otros quienes son comprometidos.

El ventilador "Smart Vent" ahora destaca ventilacion obligatoria syncronizada intermitente (SIMV) con apoyo de presion y apoyo de presion con un modo respaldo (PSVPro), los cuales amplian las capabilidades clinicas para ayudarle satisfacer las necesidades de sus clientes. Destacando PEEP electronico, modo de respaldo apnea y un detonante de flujo ajustable, tanto el modo PSVPro como el modo SIMV pueden ayudar a simplificar esfuerzos para proveer cuidado a patientes que estan respirando espontaneamente. Ejemplos de pacientes quienes pueden recibir beneficios de estos modos incluyan patientes con LMAs, patientes pediatricos y patientes que no pueden tolerar algunos agentes anesteticos.

- Modo de control de presion: Usted puede eligir una presion como objetivo y entregar asi un volumen maximo periodico para la presion y el tiempo eligido.
- Modo de control de volume: Entrega el volumen periodico que usted elige, a pesar de cambios en el flujo de gas fresco o presion en la via respiratoria, hasta el limite de presion eligido por el utilizador.
- Maneras de entregada en flujo bajo: Optimizadas por el sistema innovadoro de compensacion lo cual prove una etrega mas consistente de entregar volumenes periodicos puestos a traves de automaticamente ajustando para cambios en fugos pequenos del sistema, flujos de gas frescos, cambios en el cumplamiento de los pulmones, o perdidas de compression en el fuelle, absorbador o ventilador.

Caracteristicas Comunes

- Ventilador Smart Vent
- Entrega de gases O_2 y N_2O
- En cajon que se puede cerrar con llave
- Una tira de luces
- Un sistema de paciente de respirar con modulo de circulo

Caracteristicas Opcionales

- Vaporizadores en estilo "marco", 2 o 3 en linea, para mano izquierda o mano derecha, montada en estilo carrito o en estilo colgante
- Gases adicionales: Aire, heliox o CO_2
- Tuberia para el flujo de aire: sencilla o dual
- Yugos cilindricos: Hasta 4 en un sistema de 2 vaporizadores, 5 en un sistema de 3 vaporizadores
- Un desague auxiliar comun de gas
- Modulo Bain
- Succion integrada (central o Venturi)
- Un metro de flujo auxiliar y integrado de O_2
- Equipos de circuitos de respiracion de silicona

1800 Williamson Ct. • Louisville, Kentucky 40223 USA
800-477-2006 • 502-244-4444 • FAX: 502-244-0369

www.dremed.com

DRE

GE/Datex-Ohmeda Aestiva®/5

Una sistema para la entrega de anestesia

Equipo para la manera en que usted opera

Physical Specifications

Dimensions

	2 vaporizers	3 vaporizers
Height:	135.8 cm/53.4 in	135.8 cm/53.4 in
Width:	75 cm/29.5 in	93 cm/36.6 in
Depth:	83 cm/32.7 in	83 cm/32.7 in
Weight:	136 kg/300 lb *(Approximation)*	154 kg/340 lb *(Approximation)*

Top shelves (optional)

	2 vaporizers	3 vaporizers
Weight limit:	46 kg/100 lb	46 kg/100 lb
Width:	47.5, 67.5 or 87.5 cm/ 18.7, 26.6 or 34.4 in	87.5 or 67.5 cm/ 34.4 or 26.6 in
Depth:	41 cm/16.1 in	41 cm/16.1 in

Work surface

Height:	87.6 cm/34.5 in
Width:	47 cm/18.5 in
Depth:	31.5 cm/12.4 in

Folding side shelf (optional)

Height:	87.5 cm/34.5 in
Width:	26.5 cm/10.4 in
Depth:	31.5 cm/12.4 in
Weight limit:	11.3 kg/25 lb

DIN rail (optional)

Side of tabletop:	30 cm/12 in
Side of machine:	23.5 cm/9.25 in

Top drawer (1 standard)—locking (internal dimensions)

Height:	10.5 cm/4.1 in
Width:	38.5 cm/15.2 in
Depth:	26 cm/10.2 in

Lower drawers (optional)*

Height:	14.5 cm/5.7 in
Width:	38.5 cm/15.2 in
Depth:	26 cm/10.2 in

Lower shelves (optional)*

Heights:	9.2 cm/3.7 in	13.2 cm/5.2 in
	20.6 cm/8.2 in	24.6 cm/9.8 in
	28.6 cm/11.4 in	36 cm/14.4 in
Width:	42.5 cm/16.75 in	42.5 cm/16.75 in
Depth:	36 cm/14 in	36 cm/14 in

Absorber arms

	Adjustable	Non-adjustable
Arm length:	30.5 cm/12 in	25.4 cm/10 in
Bag arm height:	87 cm/34.3 in 104 cm/40.9 in	91.5 cm/36 in
Absorber rotation:	85°	85°

Ventilator screen

Height:	7.6 cm/3 in
Width:	15.2 cm/6 in

Sistema integrado de respiracion

- Mejora la seguridad del paciente y simplifica la gestion de cables
- Protégé todos los componentes para que no se disconnecionan y no se danan
- La communicacion continua entre el circuito de respiracion y el ventilador "Smart Vent" provisto por sensores interruptores intelligentes

Architectura Abierta

- Puede encajarse facilmente con equipo existente
- Disponible con configuraciones con una variedad amplia de combinanciones de cajones y estantes en la parte de abajo, y tambien con varias opciones de configuraciones de cajones y estantes en la parte de arriba
- Disponible con configuraciones con una baranda integrada que puede ser utilizada para incorporar acesorios adicionales

Caracteristicas Adicionales

- Diagnosticos para el servicio incorporados y componentes duraderos puede hacer la necesidad para apoyo tecnico mas facil y economic
- Es un equipo eficaz y seguro cuando se esta utilizando anestesia del flujo minimo y bajo porque puede minimizar el consumo del agentes de anestesia, reduciendo el costo para agentes
- Puede proveer caracteristicas de ventilacion de cuidado intensive, lo cual puede bajar el costo de tener que traer otro ventilador de cuidado intensive a su sala de cirugia

Ventilator Operating Specifications

Ventilation operating modes

Volume Control and Pressure Control
Synchronized Intermittent Mandatory Ventilation (SIMV)
Pressure Support (PSVPro) with Apnea Backup ventilation — (optional)

Ventilator (V_T) parameter ranges

Tidal volume range:	20 to 1500 mL (Volume Control and SIMV modes) 5 to 1500 mL (Pressure Control Mode)
Incremental settings:	20 to 100 mL (increments of 5 mL) 100 to 300 mL (increments of 10 mL) 300 to 1000 mL (increments of 25 mL) 1000 to 1500 mL (increments of 50 mL)
Minute volume range:	0 to 99.9 L/min
Pressure ($P_{Inspired}$) range:	5 to 60 cm H_2O (increments of 1 cm H_2O)
Pressure (P_{limit}) range:	12 to 100 cm H_2O (increments of 1 cm H_2O)
Pressure ($P_{support}$) range:	Off, 2 to 40 cm H_2O (increments of 1 cm H_2O)
Rate:	4 to 100 breaths per minute for Volume Control and Pressure Control; 2 to 60 breaths per minute for SIMV, PSVPro and SIMV–PC+PSV (increments of 1 breath per minute)

Inspiratory/expiratory ratio: 2:1 to 1:8 (increments of 0.5)

Inspiratory time:	0.2 to 5.0 seconds (increments of 0.1 seconds) (SIMV and PSV Pro)
Trigger window:	0 to 80% (increments of 5%)
Flow trigger:	0.2 to 1.0 L/min (increments of 0.2 L/min) 1 to 10 L/min (increments of 0.5 L/min)

Inspiration termination level: 5 to 75% (increments of 5%)
Backup mode delay: 10 to 30 seconds (increments of 5 seconds)

*Lower cabinet can be configured with a variety of shelf and drawer combinations

1800 Williamson Ct. • Louisville, Kentucky 40223 USA
800-477-2006 • 502-244-4444 • FAX: 502-244-0369
www.dremed.com

DRE

Ventilator Operating Specifications, continued

Positive End Expiratory Pressure (PEEP)

Type: Integrated, electronically controlled
Range: OFF, 4 to 30 cm H_2O (increments of 1 cm H_2O)

Ventilator performance

Pressure range at inlet: 240 kPa to 700 kPa/35 psig to 100 psig
Peak gas flow: 120 L/min + fresh gas flow
Flow valve range: 1 to 120 L/min
Flow compensation range: 200 mL/min to 15 L/min

Ventilator monitoring

Expiratory minute volume range: 0 to 99.9 L/min
Expiratory tidal volume range: 0 to 1500 mL
O_2 %: 5 to 110%
Peak pressure: –20 to 120 cm H_2O
Mean pressure: –20 to 120 cm H_2O
Plateau pressure: 0 to 120 cm H_2O
Pressure waveform sweep speed: 4-25 breaths per minute (0 to 15 seconds)
26 to 75 breaths per minute (0 to 5 seconds)
75 breaths per minute (0 to 3 seconds)

Ventilator Accuracy

Delivery/monitoring accuracy

Volume delivery: > 210 mL = better than 7%
< 210 mL = better than 15 mL
< 60 mL = better than 10 mL
Pressure delivery: ±10% or ±3 cm H_2O
PEEP delivery: ±1.5 cm H_2O
Volume monitoring: > 210 mL = better than 9%
< 210 mL = better than 18 mL
< 60 mL = better than 10 mL
Pressure monitoring: ±5% or ±2 cm H_2O

Alarm settings

Tidal volume (V_{TE}): Low: OFF, 0 to 1500 mL
High: 20 to 1600 mL, OFF
Minute volume (V_E): Low: OFF, 0 to 10 L/min
High: 0 to 30 L/min, OFF
Inspired oxygen (FiO_2): Low: 18 to 100%
High: 18 to 100%, OFF
Apnea alarm: Mechanical ventilation ON:
< 5 mL breath measured in 30 seconds
Mechanical ventilation OFF:
< 5 mL breath measured in 30 seconds
Low airway pressure: 4 cm H_2O above PEEP
High pressure: 12 to 100 cm H_2O (increments of 1 cm H_2O)
Sustained airway pressure: Mechanical ventilation ON:
P_{limit} < 30 cm H_2O, sustained limit is 6 cm H_2O
P_{limit} 30 - 60 cm H_2O, sustained limit is 20% of P_{limit}
P_{limit} > 60 cm H_2O, the sustained limit is 12 cm H_2O
PEEP and mechanical ventilation ON:
Sustained limit increases by PEEP minus 2 cm H_2O
Mechanical ventilation OFF:
P_{limit} 60 cm H_2O, sustained limit is 50% of P_{limit}
P_{limit} > 60 cm H_2O, the sustained limit is 30 cm H_2O
Subatmospheric pressure: Paw < -10 cm H_2O
Alarm silence countdown timer: 120 to 0 seconds

Ventilator Components

Flow transducer

Type: Variable orifice flow sensor
Dimensions: 22 mm OD and 15 mm ID
Location: Inspiratory outlet and expiratory inlet
Optional autoclavable sensor available

Oxygen sensor

Type: Galvanic fuel cell
Life cycle: Approximately 18 months (dependent on usage)

Anesthetic agent delivery

Vaporizers: Tec 4, Tec 5, Tec 6 Plus, Tec 7
Number of positions: 2 or 3
Mounting: Tool-free installation Selectatec® manifold interlocks and isolates vaporizers

Electrical Specifications

Current leakage

120 V: < 300µA

Light package

Task light: 12 V, 3 lamps, type 194, .270A each
Goose neck (optional): 12 V, type 1815, .200A

Power and battery backup

Power input: 120 Vac, 60 Hz, 10A
Backup power: Demonstrated battery backup time under typical operating conditions is 45 minutes when fully charged
Battery type: Internal rechargeable sealed lead acid
Power cord: Length: 5 m/16.4 ft
Rating: 15A @ 120 Vac

Communication Port

Serial interface: Isolated RS-232C compatible port

Inlet/outlet modules (120 V)

System circuit breakers: No outlets 5A w/outlets 10A
Outlets (optional): 4 outlets on back, 3-2A, 1-3A individual breakers and 1-5A combined outlet breaker, optional isolation transformer
Auxiliary outlet box (optional): 5 NEMA outlets on dovetail-mounted box, 5-2A breakers, isolation transformer
Tec 6 Plus outlet: 1 IEC 320 located above vaporizer backbar

1800 Williamson Ct. • Louisville, Kentucky 40223 USA
800-477-2006 • 502-244-4444 • FAX: 502-244-0369

GE/Datex-Ohmeda Aestiva®/5

Una sistema para la entrega de anestesia

Equipo para la manera en que usted opera

Pneumatic Specifications

Internal common gas outlet

Connector: ISO 22 mm OD and 15 mm ID

Auxiliary common gas outlet (optional)

Connector: ISO 22 mm OD and 15 mm ID

Gas supply

Pipeline input range: 240 kPa to 600 kPa/35 psig to 88 psig
Pipeline connections: DISS-male
All fittings available for O_2, N_2O, and Air, and contain pipeline filter and check valve
Cylinder input: Pin indexed in accordance with CGA-V-1; contains input filter and check valve
Note: Maximum 5 cylinders total; one oxygen required.
Primary regulator diaphragm minimum burst pressure: 2758 kPa/400 psig
Primary regulator nominal output: < 338 kPa/49 psig
Pin indexed cylinder connections

Gas power outlet (optional)

Connector: DISS indexed in accordance with CGA-V-5
Gas: Oxygen
Pressure and flow characteristics: Varies with source

O_2 controls

Method: Proportionate decrease of N_2O, CO_2, O_2/He with reduction in O_2 pressure
Supply failure alarm: Range: 193 kPa to 221 kPa/28 psig to 32 psig
Sounds at maximum volume every 10 seconds
O_2 flush: Range: 35 to 50 L/min

Flowmeters

O_2 ranges: Two tubes: 0.05 to 0.95 L/min and 1 to 15 L/min
Minimum O_2 flow: 50 mL/min ±25 mL
N_2O ranges: Two tubes: 0 to 0.95 L/min and 1 to 10 L/min
Air range: One tube option: 1 to 15 L/min
Two tube option: 0 to 0.95 and 1 to 15 L/min (low flow tube optional)
CO_2 (optional): One tube: 0 to 0.5 L/min
Heliox range (optional): One tube: 0 to 15 L/min
Calibration:

Percent of full scale flow	Accuracy (% of flowrate)
100	±2.5%
90	±2.5%
80	±2.6%
70	±2.7%
60	±2.9%
50	±3.1%
40	±3.4%
30	±4.0%
20	±5.0%
10	±8.1%

Calibration conditions:* 20°C/68°F
101.3 kPa/760 mmHg

* Different breathing circuit pressures, barometric pressures or temperatures change flowtube accuracy.

Flowmeters, continued

Hypoxic guard system

Type: Mechanical Link-25™
Range: Provides a nominal 25% concentration of oxygen in any O_2/N_2O mixture

Environmental Specifications

System operation

Temperature: 10° to 40°C/50° to 104°F
Humidity: 15 to 95% relative humidity (non-condensing)
Altitude: –440 to 3565 m/500 to 800 mmHg
System storage
Temperature: –25° to 65°C/–13° to 149°F
Humidity: 10 to 100% relative humidity (including condensing)
Altitude: –440 to 5860 m/375 to 800 mmHg
Oxygen cell storage: –15° to 50°C/5° to 122°F
10 to 95% relative humidity
500 to 800 mmHg

Electromagnetic compatibility

Immunity: Complies with all requirements of EN 60601-1-2
Emissions: CISPR 11 group 1 class B
Approvals: UL 2601-1,
CSA C22.2 #601.1
IEC 601-1
EN 60601-1

1800 Williamson Ct. • Louisville, Kentucky 40223 USA
800-477-2006 • 502-244-4444 • FAX: 502-244-0369
www.dremed.com