

CAREvent[®] ATV+ & MRI

Automatic Transport Ventilators



CAREvent[®] MRI Ventilator
Part #: 01CV7000



CAREvent[®] ATV+
Part #: 01CV6000



"INNOVATION IN RESUSCITATION"

CAREvent[®] ATV+ & MRI

The **CAREvent[®] ATV+ & MRI** are pneumatically powered, time/volume cycled, intermittent positive pressure patient ventilators specifically designed for use by trained personnel in the pre-hospital, hospital, interhospital and air ambulance environments. They do not require batteries or any electrical supply to operate. The various modes of operation of the ventilators support the resuscitation and transportation of a wide range of patients (from infants to adults). The **CAREvent[®] MRI** contains no ferrous metals making it suitable for use in an MRI environment up to 3.0 Tesla.

The independent controls for **Minute Volume** and **Frequency** provided by the **CAREvent[®] ATV+ & MRI** offer a comprehensive range of 12 ventilation frequencies and 12 minute volume settings providing **144 possible combinations of delivered tidal volume and respiratory rate**. The **ergonomically designed and colored control groupings** facilitate the selection and setting of the breathing parameters while protecting the controls. The **color groupings on the controls** add to this **“ease of use”** concept. The design of the micro-pneumatic circuitry maintains a consistent **I:E ratio (set at 1:2)** and uses virtually no drive gas.

The **“Demand Breathing”** feature allows spontaneously breathing patients to breathe on oxygen through the ventilator at their own rate and volume. If the demanded rate is sufficient, the **“Automatic Circuit Shut Off”** feature will cause the automatic cycling of the ventilator to cease when the patient takes an adequate spontaneous breath. The automatic cycling will re-start automatically should the patient stop breathing or his/her demanded volume or respiratory rate drop below the pre-determined minimum.

Compliance with the latest Guidelines for Resuscitation is provided on the **CAREvent[®] ATV+ & MRI** by the incorporation of a **“Manual Override Button”**. This allows for the provision of ventilations and chest compressions during CPR in the patient with an unprotected airway in accordance with these Guidelines. The manual flowrate is equivalent to the flowrate of the minute volume setting selected. For the intubated patient simply set the frequency control to 10 breaths per minute.

Unique **“audible and visual pneumatic alarms”** for circuit disconnection (BSI), low gas supply pressure, low airway pressure and the **audible** high airway pressure alarm are provided to improve the level of patient safety by alerting the operator to any problems with the patient’s breathing parameters. An override control is provided for the BSI alarm to silence the alarm for 15 seconds.

The adjustable **“CPAP/PEEP”** mode allows for these two functions to be supplied by the ventilator, eliminating the need for an external PEEP valve or CPAP device.

To improve ventilator operating time during transport, or when 100% O₂ is not required, an **“Air Mix Mode”** with replaceable environmental filter is provided allowing for an oxygen concentration of either 100 or 60%.

The **CAREvent[®] ATV+ & MRI** are compatible with air ambulance use, having passed the tests for both fixed and rotary wing aircraft to the US Military Standard 810E.

SPECIFICATIONS

Generic Specifications

Minute volume Range:	2 - 14 Litres
Frequency Range:	8 - 40 BPM
I:E Ratio:	Fixed at 1:2
Input Pressure Range:	45 - 70 PSI (3.1 - 4.8 Bar)
Automatic Flowrate Range:	6 - 42 L/min
Manual Flowrate Range:	6 - 42 L/min
Demand Valve Triggering Pressure:	< -5 cmH ₂ O @100 L/min
Oxygen Concentration:	60 or 100%
Relief Valve pressure Range:	20 - 60 cm H ₂ O
Operating Temperature Range:	-18°C to +50°C (0°F to +122°F)
Storage Temperature Range:	-40°C to +60°C (-40°F to +140°F)
CPAP/PEEP:	0 - 20 cm H ₂ O
Breathing System Integrity Alarm:	Visual and Audible
BSI Override Re-start Delay:	15 seconds

Relative Humidity for Storage and operating Use:	15 to 95%
Patient Valve Dead Space:	8 ml.
Gas Supply Status Indicator:	Visual
Low Gas Input pressure alarm:	Visual and Audible
High Airway pressure Alarm:	Audible
Inspiratory Resistances:	< -5 cm H ₂ O @ 50 L/min
Expiratory Resistances:	< 6 cm H ₂ O @ 30 L/min
Pressure Gauge Accuracy:	-20 to +100 cm H ₂ O
Dimensions ATV/ATV+ (inches):	9.25 x 6.5 x 4.3 (approx)
(centimeters):	235 x 165 x 110 (approx)
Weight ATV+ & MRI	6.25lbs /2.84 kg (approx)

Enhanced specification for the **CAREvent[®] MRI**:

Tested in an MRI environment to maximum static magnetic field strength of: 3.0 TESLA

Ordering Information:

- 01CV6000 CAREvent[®] ATV+** - complete with 6 foot gas supply hose, Deluxe Transport Ventilation Circuit with PEEP port, Test Lung and Universal Face Mask.
- 01CV7000 CAREvent[®] MRI** - complete with 6 foot gas supply hose, Deluxe Transport Ventilation Circuit with PEEP port, Test Lung and Universal Face Mask.