



Recovery starts with synchrony

Respironics V200 Ventilator specifications

PHILIPS

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The Respironics V200 ventilator supports patient care by delivering advanced patient-ventilator synchrony with standard-of-care ventilation modes. With Auto-Trak, Flow-Trak, and Baby-Trak breath delivery technology, you can provide optimal synchrony to all of your patients.

1. Patient types

Adults
Pediatrics
Neonates (≥ 0.5 kg)

2. Breath types

Volume control ventilation (VCV)
Pressure control ventilation (PCV)

3. Modes

Assist/control (A/C)
Continuous positive airway pressure (CPAP)
Noninvasive ventilation (NIV)
Pressure support ventilation (PSV)
Synchronized intermittent mandatory ventilation (SIMV)
SIMV with pressure support (SIMV/PSV)

4. Respiratory mechanics

f/VT (RSBI)	Rapid shallow breathing index
VC	Vital capacity
MIP	Maximum inspiratory pressure
P0.1	Occlusion pressure at 100 ms
Static C	Static compliance
Static R	Static resistance
Dynamic C	Dynamic compliance
Dynamic R	Dynamic resistance
Ti/Ttot	I-time divided by total cycle time
Pplat	Plateau pressure
Peak L-Flow	Peak lung flow
auto-PEEP	Unintended positive end-expiratory pressure
MAP	Mean airway pressure

5. Adult and pediatric

Oxygen concentration	21-100%
Tidal volume	50-2500 ml
Leak compensation	Auto-adaptive up to 60 l/min
Respiratory rate	1-80 breaths/min
Peak inspiratory flow	3-140 l/min (controlled) 0-200 l/min (spontaneous)
PEEP/CPAP	0-35 cmH ₂ O
Plateau pressure	0-100 cmH ₂ O
PSV	0-100 cmH ₂ O
Inspiratory pressure	5-100 cmH ₂ O
Inspiratory time	0.1-9.9 s
Rise time	0.1-0.9 s
Flow delivery	Descending ramp or square
Inspiratory triggers	
• Pressure	-20 to -0.1 cmH ₂ O
• Flow	0.5-20 l/min (base flow equals 3 l/min above flow sensitivity)
• Auto-Trak	Auto-adaptive triggering threshold
Expiratory cycling	
• E-cycle	10-80% of peak inspiratory flow
• Auto-Trak	Auto-adaptive cycling threshold
Apnea (back-up)	1-80 breaths/min
IPAP	2-35 cmH ₂ O
EPAP	2-25 cmH ₂ O
I:E range	1:10 - 4:1

6. Neonatal with Baby-Trak

Respiratory rate	1-150 breaths/min
Set inspiratory time	0.1-2.0 s
Set inspiratory pressure	5-100 cmH ₂ O
PSV	0-100 cmH ₂ O
Rise time	0.1-0.5 s
E-cycle	10-80%
I-trigger	0.3-10 l/min
% Leak Display	0-100% (determines leak past an un-cuffed tube and adjusts per leak %)

7. Additional monitored parameters

PIP	Peak inspiratory pressure
PE End	Pressure at end-expiration
PI End	Pressure at end-inspiration
VT	Tidal volume
I:E	Inspiratory to expiratory time ratio
VE Spont	Spontaneous minute volume
VE	Minute volume
%O ₂	Percentage oxygen
Spont RR	Spontaneous respiratory rate
Total RR	Total respiratory rate

8. Clinical and technical alarms

8.1 Alarm Controls	
Audible alarm volume	54-85 db(A) (complies with EN 475)
Alarm silence	120 s (disables audio alarm)
Alarm reset	Terminates alarm silence
8.2 Alarm Ranges	
High inspiratory pressure	10–105 cmH ₂ O
Low inspiratory pressure	3–105 cmH ₂ O
Low PEEP/CPAP pressure	0–35 cmH ₂ O
High respiratory rate	0–150 breaths/min
Low expiratory mandatory V _T	0 ml–2500 ml
Low expiratory spontaneous V _T	0 ml–2500 ml
High expiratory minute volume	0–60 l/min
Low expiratory minute volume	0–60 l/min
Apnea intervals	10–60 s
High leak	0–60 l/min
8.3 Nonadjustable Alarms	
Long inspiratory time	3 s adult, 2 s pediatric
O ₂ percentage	+/-6%
Circuit occlusion	
Ventilator inoperability	
Low O ₂ pressure	

9. Graphics

9.1 Waveforms	
Flow vs. time	
Pressure vs. time	
Volume vs. time	
9.2 Loops	
Flow/volume	
Pressure/volume	
9.3 Additional features	
Freeze screen with data-display cursor	
Auto-scale	
Loop save and overlay	

10. Options and upgrades

Auto-Trak software
Flow-Trak software
Neonatal software with Baby-Trak
Speaking mode software*
Respiratory profile monitor interface software
72-hour trending package software
Respiratory mechanics software
External battery
Oxygen manifold kit

* Not available outside the US and in all languages.



11. Communication

Philips VueLink open interface
Philips DeviceLink
Respi-Link
Capsule
Other monitoring and patient information systems
RS232 communications port
Printer compatible
PCL3 & PCL5
Analog output port

12. Self tests

Short self test (SST)
Extended self test (EST)

13. Environmental

13.1 Temperature	
Operation	10–40 °C (50 to 104 °F)
Storage	-20–60 °C (-4 to 140 °F)
13.2 Relative humidity	
Operation	10–95% (non-condensing)
Storage	10–100% (non-condensing)
13.3 Atmospheric pressure	
Operation	700–1060 kPa
Storage	500–1060 kPa
13.4 Altitude	
Operation	0–3280 m (0 to 10,000 ft)
Storage	Up to 6560 m (20,000 ft)

14. Electrical and gas supply

14.1 Electrical		
Input voltage	100–240 VAC, 50/60 Hz, 6 A maximum (9 A maximum for 100–120 VAC ventilator with humidifier)	
Backup battery	at least 30 min	
External battery	up to 4 h (with backup battery)	
14.2 Gas Supply		
Maximum inlet pressure	90 PSIG	
Minimum inlet pressure	50 PSIG	
Hose connections	DISS, AGA, NIST, or French standard	
14.3 Power indicators		
	Visual	Audible
Loss of AC power	•	•
Low AC power	•	•
Battery low	•	•
Battery in use	•	
Alternating current	•	
Main battery in use	•	
External battery	•	

15. Regulatory compliance

IEC 601-1/EN 60601-1
IEC 601-1-2/EN 60601-1-2
EN 794-1
CSA C22.2 No. 601-1
CSA C22.2 No. 601-2-12
UL 2601-1
IEC 60601-2-12 (2001)
Council Directives 93/42/EEC

16. Physical dimensions

Height	42 cm (17 in)
Width	38 cm (15 in)
Depth	65 cm (25 in)
Weight	30 kg (66 lb)
Weight with cart	42 kg (93 lb)



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Hoech JP MCI 4102116 PN 1059558
4522 962 44781 * MAY 2009