



## Transitioning to the future. Advancing respiratory care today.

When you're treating respiratory patients, it's hard to know what today will bring. One thing is for sure, transitions can occur often, and for any number of reasons. Conditions escalate. Patients are moved. Therapy modes are changed. Each time, patient care is at risk of disruption, causing needless stress on the team. That's why Philips Respiroics is making a transition of its own — to an even brighter future in respiratory care.

Philips Respiroics is the #1 respiratory\* brand† of choice by U.S. pulmonary physicians. And, we're unveiling a new platform of innovative Trilogy Evo ventilators. Bridging ground-breaking technology with improved data flow, Trilogy Evo helps benefit a broad spectrum of patients, from newborns to adults. Trilogy Evo is the only portable life support ventilator platform designed to stay with patients and provide consistent therapy and monitoring as they change care environments and when their condition changes. So when transitions do occur, disruptions are minimized; and the level of respiratory care remains intact. Making today a much better day for clinicians, caregivers, and everyone who depends on them.



\*Ventilators and oxygen †Philips Respiroics

## Specifications

### Ventilation modes

A/C-PC: Assist control (pressure control)
A/C-VC: Assist control (volume control)
CPAP: Continuous positive airway pressure
PSV: Pressure support ventilation
S/T: Spontaneous/timed ventilation
SIMV-PC: Synchronized intermittent mandatory ventilation (pressure control)
SIMV-VC: Synchronized intermittent mandatory ventilation (volume control)
AVAPS-AE
MPV-PC: Mouthpiece ventilation (pressure control)
MPV-VC: Mouthpiece ventilation (volume control)

### Physical

Weight	5.2 Kg (11.5 lbs) device 5.8 Kg (12.7 lbs) with detachable battery 6.3 Kg (13.8 lbs) with oxygen blender and detachable battery
Size	Without oxygen blender: 16.5 cm D x 28.6 cm W x 24.5 cm H 6.48" D x 11.25" W x 9.65" H With oxygen blender: 19.3 cm D x 28.6 cm W x 24.5 cm H 7.6" D x 11.25" W x 9.65" H
Screen dimensions	8", 20.32 cm
Ingress protection	IP22: protection against finger-sized objects and protected against dripping water when tilted up to 15 degrees.

### Oxygen

Low flow	0 to 30 l/min; maximum 10 psi
High pressure	280 to 600 kPa (41 to 87 psi)

### Measured and displayed patient parameters

Tidal volume (V <sub>ti</sub> or V <sub>te</sub> )	0 to 2000 ml
Minute ventilation (MinVent)	0 to 30 l/min
Leak	0 to 200 l/min
Respiratory rate (RR)	0 to 90 BPM
Peak inspiratory flow (PIF)	0 to 200 l/min
Peak inspiratory pressure (PIP)	0 to 90 cmH <sub>2</sub> O
Mean airway pressure	0 to 90 cmH <sub>2</sub> O
Percentage spontaneous triggered breaths (%Spont Trig)	0 to 100%
I:E ratio	9.9:1 to 1:9.9
Dynamic compliance (Dyn C)	1 to 100 ml/cmH <sub>2</sub> O
Dynamic resistance (Dyn R)	5 to 200 cmH <sub>2</sub> O/l/sec
Dynamic plateau pressure (Dyn Pplat)	0 to 90 cmH <sub>2</sub> O
Auto-PEEP	0 to 20 cmH <sub>2</sub> O
FiO <sub>2</sub> with FiO <sub>2</sub> sensor	21% to 100%
SpO <sub>2</sub> with pulse oximeter accessory	0 to 100%
Pulse rate with pulse oximeter accessory	18 to 321 beats per minute
EtCO <sub>2</sub> with CO <sub>2</sub> accessory	0 to 150 mmHg

### Electrical

AC input voltage	100V - 240V, 50/60 Hz, 1.7 - 0.6A
DC input voltage	12/24V 6.5A
Internal and detachable Li-ion batteries	15 hours' nominal total run time per method in IEC 80601-2-72 (7.5 hours each battery)
Charge time for detachable and internal battery	from 0% to 80%: 2.5 hours from 0% to 100%: 3.5 hours

## Specifications *(continued)*

### Alarms

Inspiratory Pressure	1 - 90 cmH <sub>2</sub> O
Tidal Volume	OFF, 10 - 2000 ml
Minute Ventilation	OFF, 0.2 - 30 L/min
Respiratory Rate	OFF, 1 - 90 BPM
Circuit Disconnection	OFF, 5 - 60 sec
Apnea Interval	5 - 60 sec
No trigger	OFF, 0.5 - 15 min. (Only in MPV)

### Environmental

Operating	Temperature: 0°C to 40°C Relative humidity: 5% to 90% RH, non-condensing Atmospheric pressure: 62 to 106 kPa Altitude: -1261 to 12,971 feet Battery charging temperature: 5°C to 40°C
Transient operating temperature	-20°C to 50°C
Storage temperature	Temperature: -25°C to 70°C Relative humidity: 5% to 93% RH, non-condensing

### Controls

AVAPS with passive circuit	PSV, S/T, and A/C-PC modes only
Tidal volume	35 - 2000 ml on Dual Limb and Active Flow circuits, 50 - 2000 ml on passive and active PAP circuits
Breath rate	0 - 80 BPM
PEEP	0 - 35 cmH <sub>2</sub> O for active circuits 3 - 25 cmH <sub>2</sub> O for passive circuits
EPAP/CPAP	3 - 25 cmH <sub>2</sub> O
IPAP	3 - 60 cmH <sub>2</sub> O
Pressure support/ pressure control	0 - 60 cmH <sub>2</sub> O
Inspiratory time	0.3 - 5.0s
Rise time	0 - 6
Triggering and cycling	Off, AutoTrak, Sensitive AutoTrak, and Flow Trigger
Flow trigger sensitivity	0.5 - 9 l/min
Flow cycle sensitivity	10% - 90% of peak flow
Flow pattern	Square, Ramp
FiO <sub>2</sub>	21% - 100%
Inspiratory time min/max	0.3 - 3.0 sec
Backup ventilation	ON - OFF

### Standards

General	<ul style="list-style-type: none"> <li>• IEC 60601-1-1 Medical electrical equipment. Part 1-1: General requirements for safety. Collateral standard: Safety requirements for medical electrical systems</li> </ul>
Collateral	<ul style="list-style-type: none"> <li>• IEC 60601-1-11 Home Health Care Environment according to transit-operable usage</li> </ul>
Particular	<p>Device essential performance is specified in each of the following standards:</p> <ul style="list-style-type: none"> <li>• ISO 80601-2-72 Medical electrical equipment. Part 2-72: Particular requirements for basic safety and essential performance of home healthcare environment ventilators for ventilator-dependent patients</li> <li>• ISO 80601-2-12: Medical electrical equipment. Part 2-12: Particular requirements for basic safety and essential performance of critical care ventilators</li> <li>• ISO 80601-2-61 Medical electrical equipment. Part 2-61: Particular requirements for basic safety and essential performance of pulse oximeter equipment</li> <li>• ISO 80601-2-55 Medical electrical equipment. Part 2-55: Particular requirements for the basic safety and essential performance of respiratory gas monitors</li> </ul>
Wireless communication	<ul style="list-style-type: none"> <li>• Bluetooth Core Specification version 4.1</li> <li>• ISO/IEC 18092:2013: Information technology. Telecommunications and information exchange between systems. Near Field Communication. Interface and Protocol (NFCIP-1)</li> <li>• ISO IEC 21481 ed 2.0: Information technology. Telecommunications and information exchange between systems. Near Field Communication Interface and Protocol -2 (NFCIP-2)</li> <li>• ISO/IEC 14443 ed 2.0: Identification cards. Contactless integrated circuit cards. Proximity cards.</li> <li>• WLAN Standard: IEEE 802.11 (2012) b/g/n: Information technology. Telecommunications and information exchange between systems. Local and metropolitan area networks. Specific requirements. Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications</li> </ul>

