**S1100 main technical parameters of ventilator (physical version)**

**I. Expected uses**

**S1100 type ventilator is suitable for all kinds of medical institutions; respiratory support for cardiopulmonary resuscitation; acute respiratory insufficiency or oxygenation dysfunction caused by various causes; intraoperative and postoperative respiratory support; and other people who need ventilator treatment.**

**II. Performance characteristics**

**1. Pneumatic and electronic control mode**

**2,15 inch colour touch LCD**

**3, with capacity control, pressure limitation and other working methods**

**4. Non-invasive and invasive ventilation**

**5. Multiple alarm functions**

**6, with sequence Compensatory work,**

**7. High precision air-oxygen mixer, stable and reliable,**

**8. Multi-parameter display,**

**9. Equipped with internal backup power supply, power cut off work, automatically converted to backup power**

**With the same brand of medical air compressor and ventilator,**

**11. Optional end-respiratory carbon dioxide monitoring,**

**12, with screen operation key freezing function and breathing ring freezing function**

**III. Working conditions**

**Power supply voltage 220 V±22 VV±**

**2. Power frequency 50 HZ±1 HZ**

**3. Input power 1030 VA( medical air compressor)**

**80VA( Medical air compressor not available)**

**1. Gas source O2、AIR( medical grade)**

**2. Gas pressure 280 kPa ~600 kPa**

**Temperature range +5℃~+40℃**

**4. Relative humidity range ≤80 (PSV)**

**8. Autonomous breathing/continuous positive airway pressure ventilation mode (SPONT/CPAP)**

**9. Pressure regulated capacity controlled ventilation mode (PRVC)[ optional]**

**Airway pressure release ventilation mode (APRV)[ optional]**

**Biphasic airway positive pressure ventilation mode (DuoLevel)[ optional]**

**12. Sigh ventilation mode (SIGH)**

**13 Controlled ventilation mode (MAUN)**

**V. MAIN TECHNICAL INDICATORS**

**Adjustment parameters**

**1, frequency (Freq)1 / min ~100 min**

**SIMV model: 1/ min~40/ min,**

**Other than SIMV mode: VTH 4/min~40/ min,**

**VTL 20/min~100 min**

**inspiratory time (breath ratio)(Tinsp)0,0.2 s~12.0 s (except for SIMV mode, breath ratio 4:1~1:8)**

**Tidal (VT)0,20 mL ~2 mL 000**

**(VTH：250mL ~2000 mL VTL：0,20mLVTH：250mL ~300 mL)**

**Maximum ventilation (MV) VTH :≥18 L/min**

**L/min VTL：≥10**

**Positive end-expiratory pressure (PEEP)0 cmH2O ~40**

**6. Persistent pressure (CPAP) 0 cmH2O ~20 cmH2O**

**Sustained airflow VTH：7L/min ~60 L/min**

**VTL：2L/min ~30 L/min**

**Pressure trigger sensitivity (Ptr)-20 cmH2O ~0(based on PEEP)**

**Pressure control (Pc)5 cmH2O ~60 Pressure Support (Ps)0 cmH2O ~60**

**Traffic trigger sensitivity (Ftr) off ,0.5 L/min ~30 L/min**

**6.21 per cent ~100 per cent adjustment for inhalation oxygen concentration**

**Time of breath holding (end breath holding, suction platform)(Tip)0~6 50% suction time)**

**8. Sigh ventilation (SIGH) 0,1/100~5/100**

**(Set at 1.5 times ~2 times)**

**asphyxia ventilation OFF,5s ~60 s**

**Maximum inspiratory velocity ≥60 L/min**

**Pressure limit (adjustable pressure limit)20 cmH2O ~100 cmH2O**

**12. Maximum ultimate pressure (safe release) Pressure relief)≤125 cmH2O)**

**Output gas flow ≥25 L/min during manual ventilation**

**14. Nebulizer gas Maximum output pressure ≤0.2 MPa、 maximum output flow ≥8 L/min**

**Monitoring parameters**

**Frequency (Freq)0/ min ~100/ min**

**2, tidal volume (VT)0 mL ~3000 mL**

**Minute ventilation (MV)0 L/min ~99**

**Respiratory pressure monitoring 0 cmH2O ~100 cmH2O**

**Patient dynamic lung compliance monitoring 1 mL/cmH2O ~1000 mL/cmH2O**

**6. Inhaled oxygen concentrations 15~100 per cent**

**Polymers Number of monitoring indicators**

**1. Autonomous respiratory tidal volume (VTspn)**

**2. Autonomous respiratory ventilation (MVspn)**

**3. Autonomous respiratory rate (Fspn)**

**4, total frequency (Ftot)**

**5. Breath intake (VTi)**

**6. Autonomous respiratory lung compliance (Cspn)**

**7, average pressure (Pmean)**

**1. platform pressure (Pplat)**

**2. shallow fast breathing index (RSBI)**

**VI. Graphic display**

**1. Airway pressure-time waveform (P-T)**

**2, Flow-Time Waveform (F-T)**

**3. Hoo-Moon II Carbon oxide (CO2-T), tidal volume - time waveform (V-T)**

**Pressure capacity ring (P-V), flow capacity ring (F-V)**

**5. Multi-parameter display window switching**

**VII. Alarm and protection**

**1. AC power outage alarm**

**2. Internal backup supply voltage undervoltage alarm**

**3. Alarm of gas cut (no tidal volume)**

**4, High (Low) Tidal Alarm**

**5. High (low) ventilation alarm**

**6, high (low) CO2 alarm [optional]**

**7. High (low) respiratory rate alarm**

**8, high (low) positive end pressure**