# AAU Pandemic Ventilator

PN-RI001-80-001-A-BOM AAU Pandemic Ventilator (Bill of Materials)
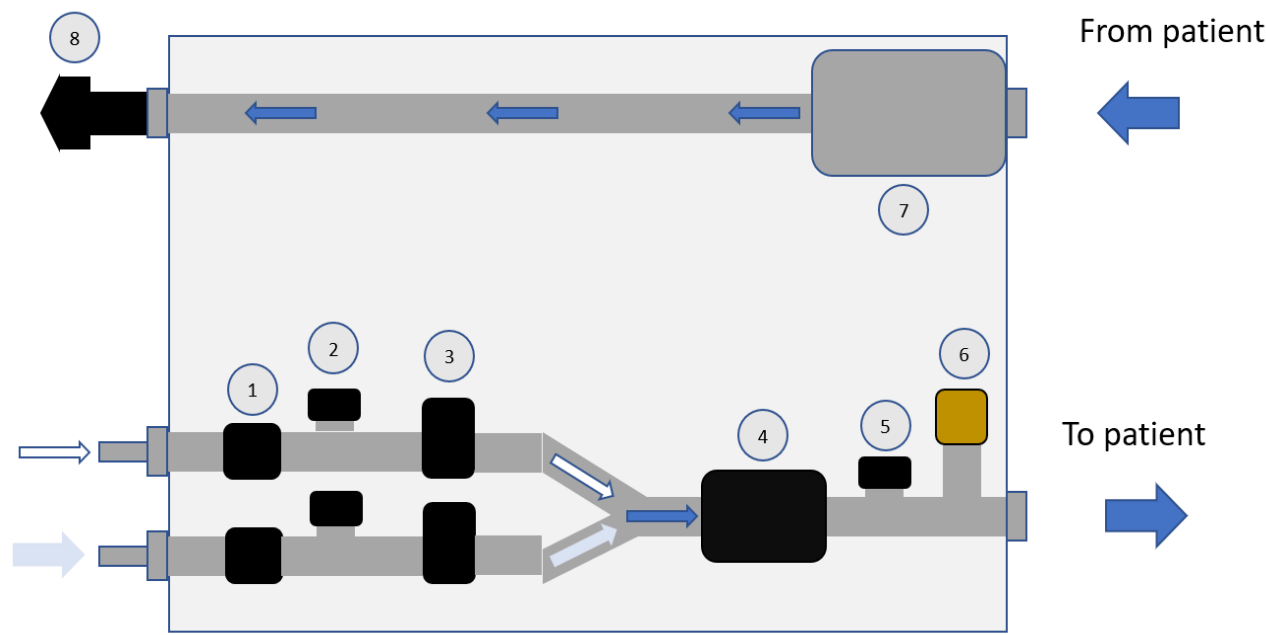


Figure 1: Part overview

| PART CATEGORIES | ID | Definition |
|---|---|---|
| | FUNC | Functional components |
| | UI | User input and control |
| | EXT | External connections |
| | BOX | Box |
| | ASM | Assembly |

**Notice:**
The parts included here are examples of parts that have been used to build the AAU pandemic ventilator. The list should not be interpreted as endorsement by Aalborg University for any of the manufacturers or manufacturers parts included here.

| PART NUMBER | CAT | DESCRIPTION | QTY | VENDOR CODE | VENDOR | COMMENT |
|---|---|---|---|---|---|---|
| | FUNC | Regulator Medical G1/8 0-4bar AIR/O2 | 2 | RM1H-1GD-NDV | Norgren A/S | # 1 on figure |
| | FUNC | Manometer 0-10 bar Ø40mm G1/8'' Ned | 2 | 17131106 | FLAIRMO DK | #1 on figure |
| | FUNC | Tryksensor 0-10 bar G1/4'' 4-20mA M12 | 2 | PT5404 | IFM electronic A/S | #2 on figure |
| | FUNC | Proportional ventil 0-100l/min 24 VDC 3/8'' - two options | | | | #3 on figure |
| | FUNC | Option 1: Proportional ventil 0-100l/min 24 VDC 3/8'' | 2 | PVQ31-5g-23-01-H.x33 | SMC A/S | Option 1 - tested |
| | FUNC | Option 2: Proportional ventil 0-100l/min 24 VDC 3/8'' | 2 | 255467 | Bürkert Danmark A/S | Option 2 - testing |
| | FUNC | Option 2: Kabelstik til til styring af proportionalventil | 2 | 316530 | Bürkert Danmark A/S | option 2 - testing |
| | FUNC | Flowsensor -10 - 160 L/min | 1 | SFM 3020 | Sensirion | #4 on figure |
| | FUNC | Tryksensor 0-0,1 bar G1/4'' 4-20mA  M12 | 1 | PA3589 | IFM electronic A/S | #5 on figure |
| | FUNC | Overtryksventil | 1 | AV619, 80 cmH2O | Witt | #6 on figure |
| | FUNC | Magnetventil 2/2 NC G1" ø25 24VDC 10 bar | 1 | VXZ262LGK | SMC A/S | #7 on figure |
| | FUNC | PEEP Ventil 2,5 - 20 cmH2O | 1 | 000 177 000 | AMBU A/S | #8 on figure |
| | UI | PLC CompactLogix 5370 Controller 1769-L27ERM-QBFC1B | 1 | 1769-L27ERM-QBFC1B | Wexøe A/S | |
| | UI | Touchscreen TFT 4'' til PLC 2080 | 1 | 2711R-T4T | Wexøe A/S | |
| | UI | Strømforsyning 24VDC 100-230VAC med oplader til bat. backup | 1 | 787-1675 | WAGO Denmark ApS | |
| | UI | Batteri til 24V DC strømforsyning [21003015] | 1 | 787-876 | WAGO Denmark ApS | |
| | UI | Strømforsyning 24VDC til 5 VDC 0,5A | 1 | 787-2801 | WAGO Denmark ApS | |
| | UI | Buzzer 24V DC 80dB(A) | 1 | 107.000.75 | WERMA Signaltechnik GmbH + Co. KG | |
| | UI | Push button 1-polet m. LED 24 V ø22mm | 1 | | FLAIRMO DK | |
| | UI | Dæksel til push botton og drejeknap | 1 | 800F-AL01 | Wexøe A/S | |
| | EXT | Ilt og luft slange med 1/4M omløber 5m | 1 | Ilt og luft slange 5m | Dameca A/S | |
| | EXT | Netkabel 4,5m Hospital stik | 1 | 17152023 | FLAIRMO DK | |
| | BOX | Elskab 400x400x200mmm | 1 | MAS0404021-R5 | Carlo Gavazzi | |
| | BOX | Håndtag  Ø6x140mm | 2 | RG-1N.140.84 | Scandiloc A/S | |
| | ASM | DIN Skinne | 0,4 | 2288751 | Sanistål A/S | |
| | ASM | Slange PVC KLAR uforst. Ø24/ø19 | 0,8 | JA3-1924 | Roykon | |

| | | | | |
|---|---|---|---|---|
| ASM | M25x1,5 møtrik til kabelforskruning | 1 | 53119030 | Miltronic |
| ASM | Sikring 5x20 5A | 1 | 1716042 | Sanistål A/S |
| ASM | Indgang C14 10 A/250 VAC Sort Skruemontering | 1 | DD11.0111.1111 | ELFA Distrelec A/S |
| ASM | IEC C13  kabel sikringslåse 43 mm | 1 | KT0006 | ELFA Distrelec A/S |
| ASM | Kabel M12 (IFM) | 3 | EVC471 | IFM electronic a/s |
| ASM | Sikringsskuffe 1-polet til indgang C14 | 1 | 143-23-370 | ELFA Distrelec A/S |
| ASM | Klemme 4L GRÅ 1,5mm2 | 4 | 2001-1401 | WAGO Denmark ApS |
| ASM | Klemme 4L PE GRØN/GUL 1,5mm2 | 1 | 2001-1407 | WAGO Denmark ApS |
| ASM | Klemme endestop 4L ORANGE 1,5mm2 | 1 | 2002-1492 | WAGO Denmark ApS |
| ASM | Klemme DIN stop GRÅ | 1 | 249-116 | WAGO Denmark ApS |
| ASM | Jumper 2-vejs | 2 | 2001-402 | WAGO Denmark ApS |
| ASM | Relæmondul | 2 | 857-304 | WAGO Denmark ApS |
| ASM | Skotsgennemføring 1/4'' x M20 | 2 | 51392820 | FLAIRMO DK |
| ASM | Slangenippel Ø22/ø19 Medical POM | 1 | 51422219_r00 | FLAIRMO DK |
| ASM | Slangenippel ø22/G1/2" Medical SS316 | 2 | 51422248_r00 | FLAIRMO DK |
| ASM | T-stk 1/2'' m/n/n BSPP/BSPT/BSPT | 1 | 51534848 | FLAIRMO DK |
| ASM | Slangenippel ø19 1" | 1 | 17131024 | FLAIRMO DK |
| ASM | G1/2'' 6mm kontra møtrik | 2 | 17131034 | FLAIRMO DK |