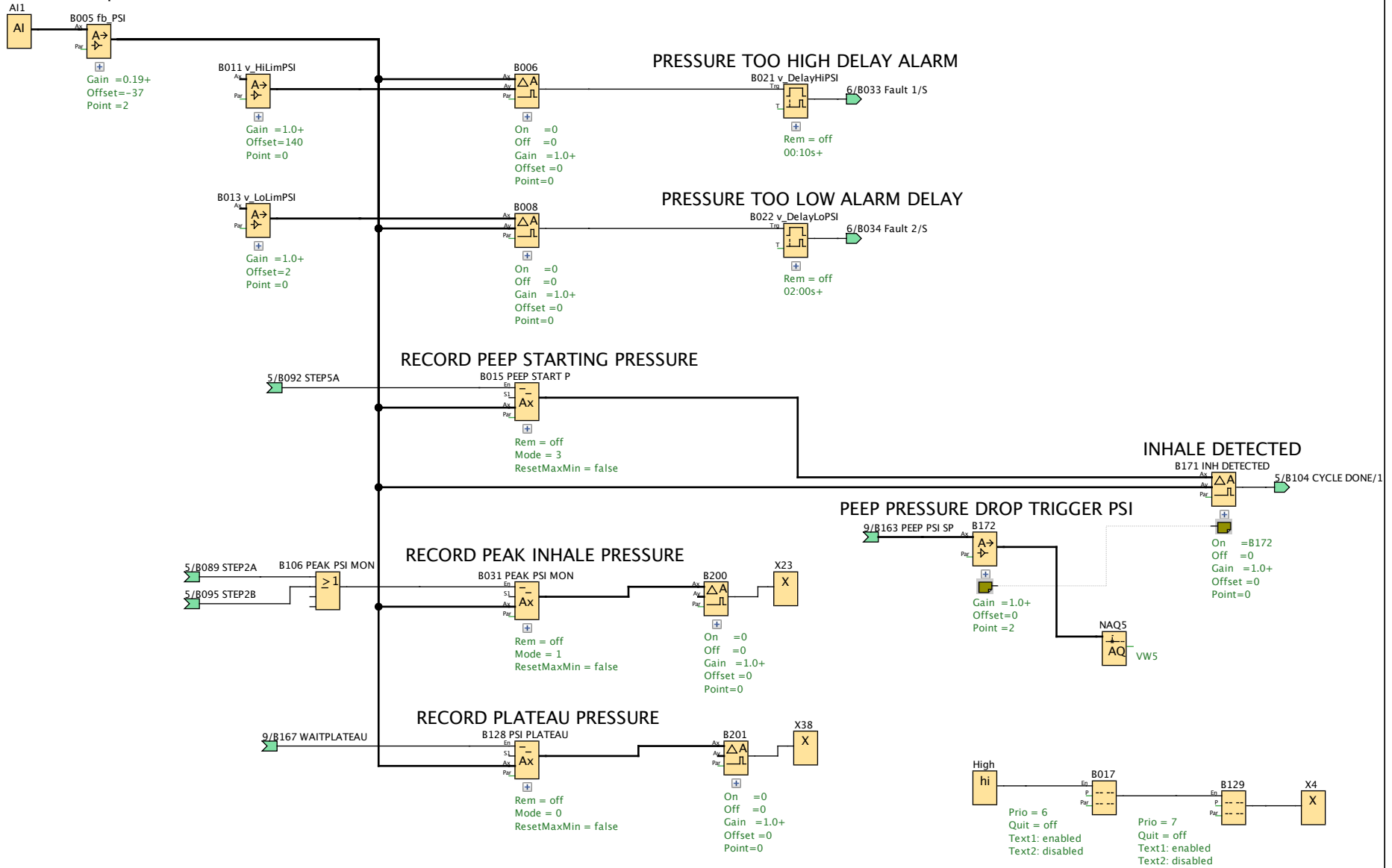


PAGE 1 - PRESSURE MEASUREMENT

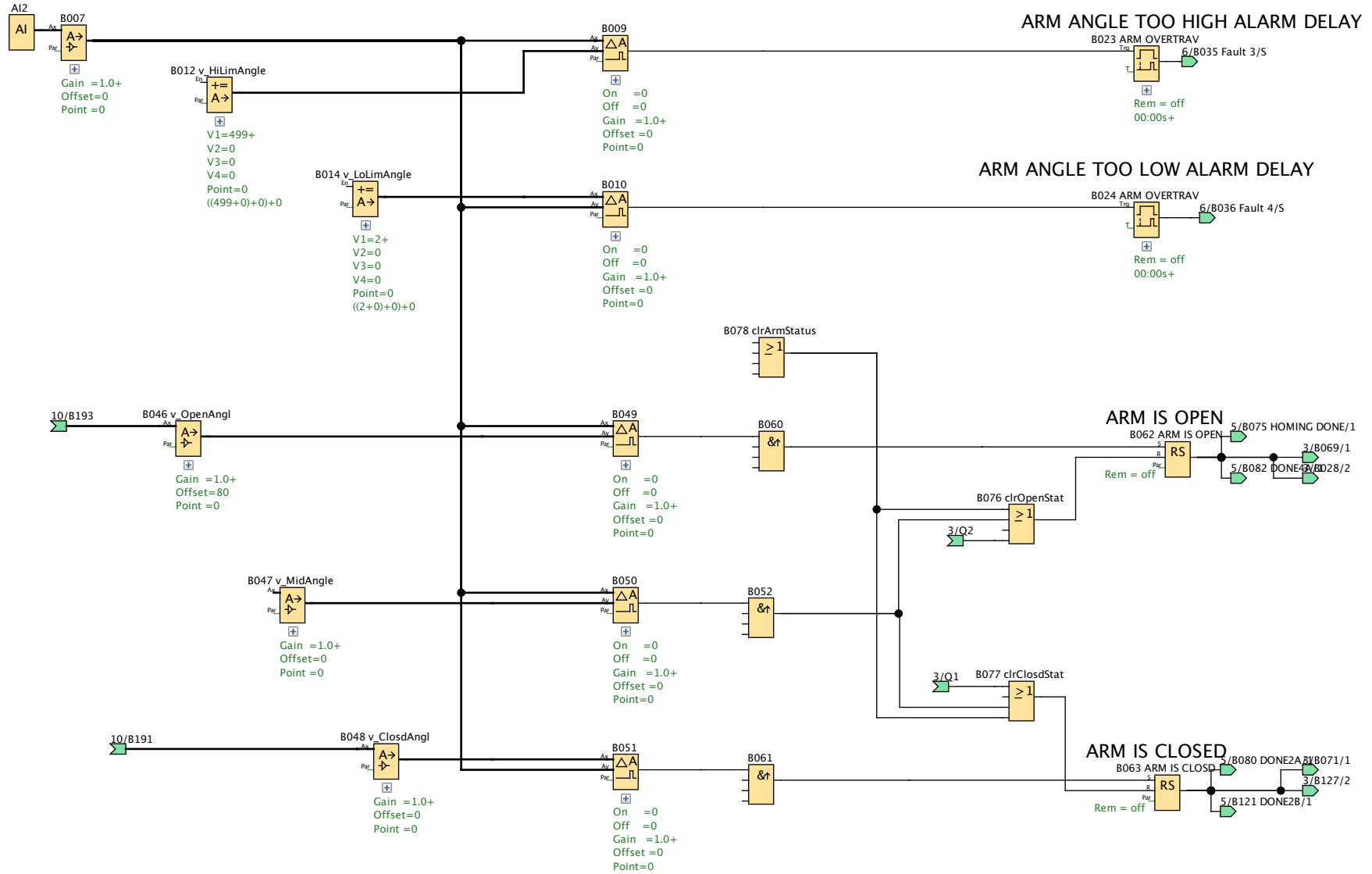
Pressure 0-10V 0-1.45psi



Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	1 / 33

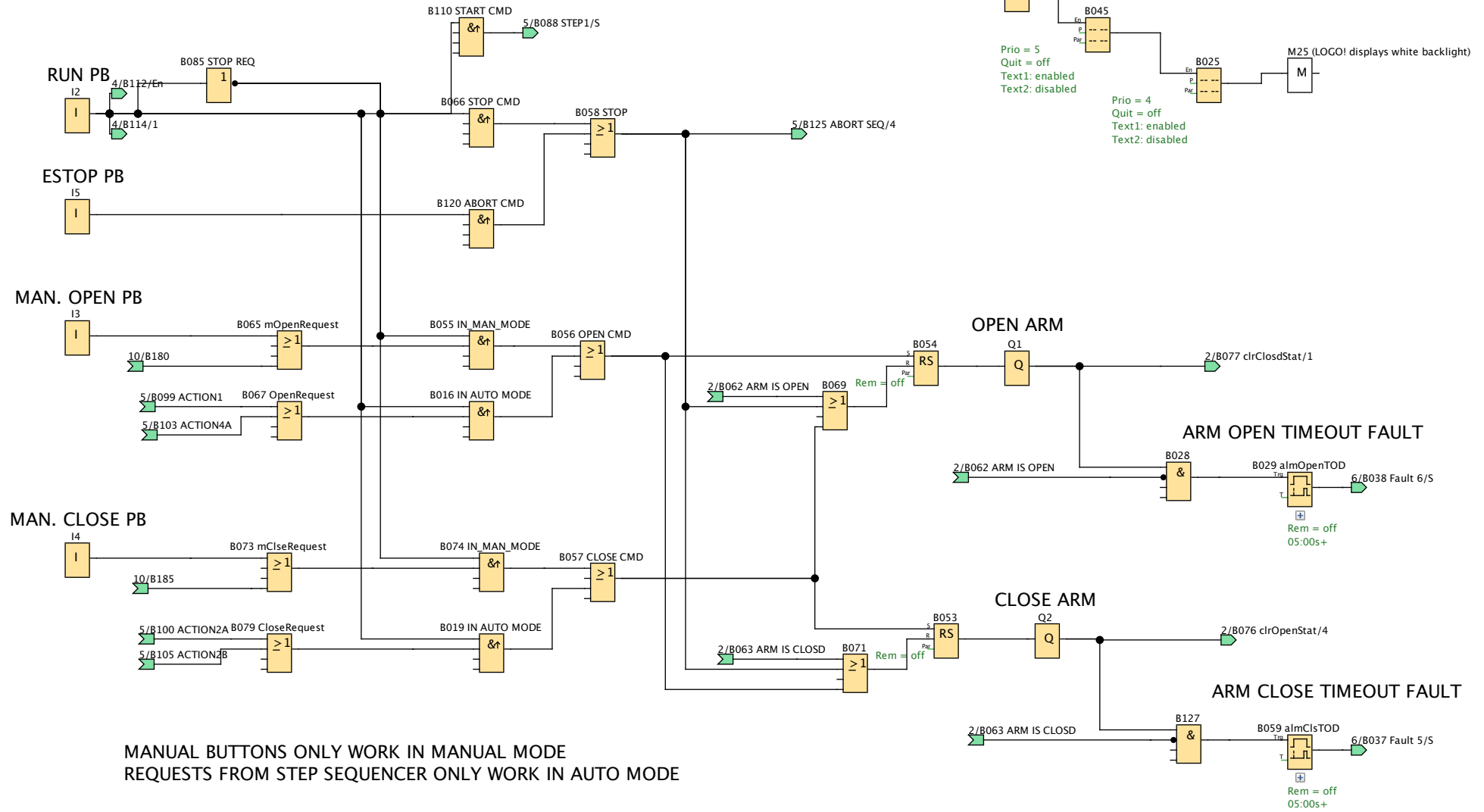
PAGE 2 - ARM ANGLE MEASUREMENT

ARM ANGLE 0-5V = 0-180 DEG



Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	2 / 33

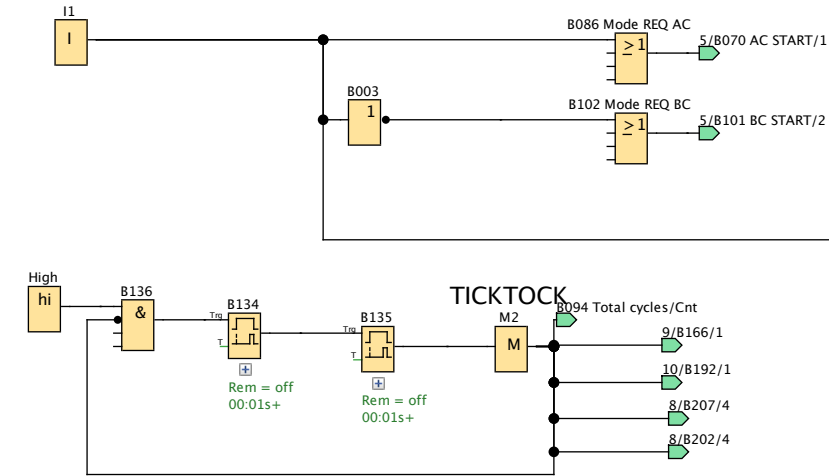
PAGE 3 ARM CONTROL



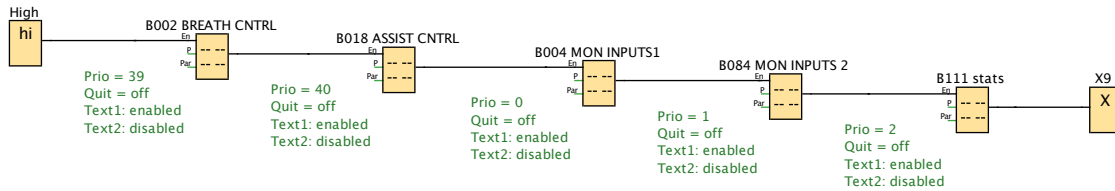
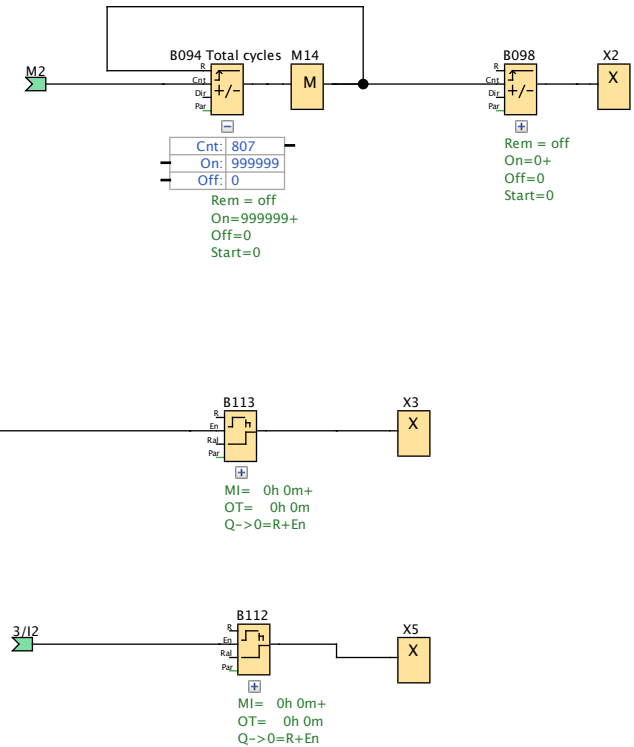
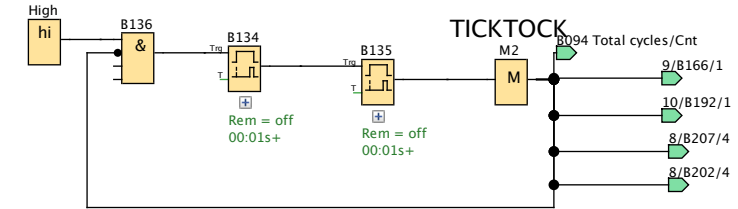
Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	3 / 33

PAGE 4 TICK TOCK BIT

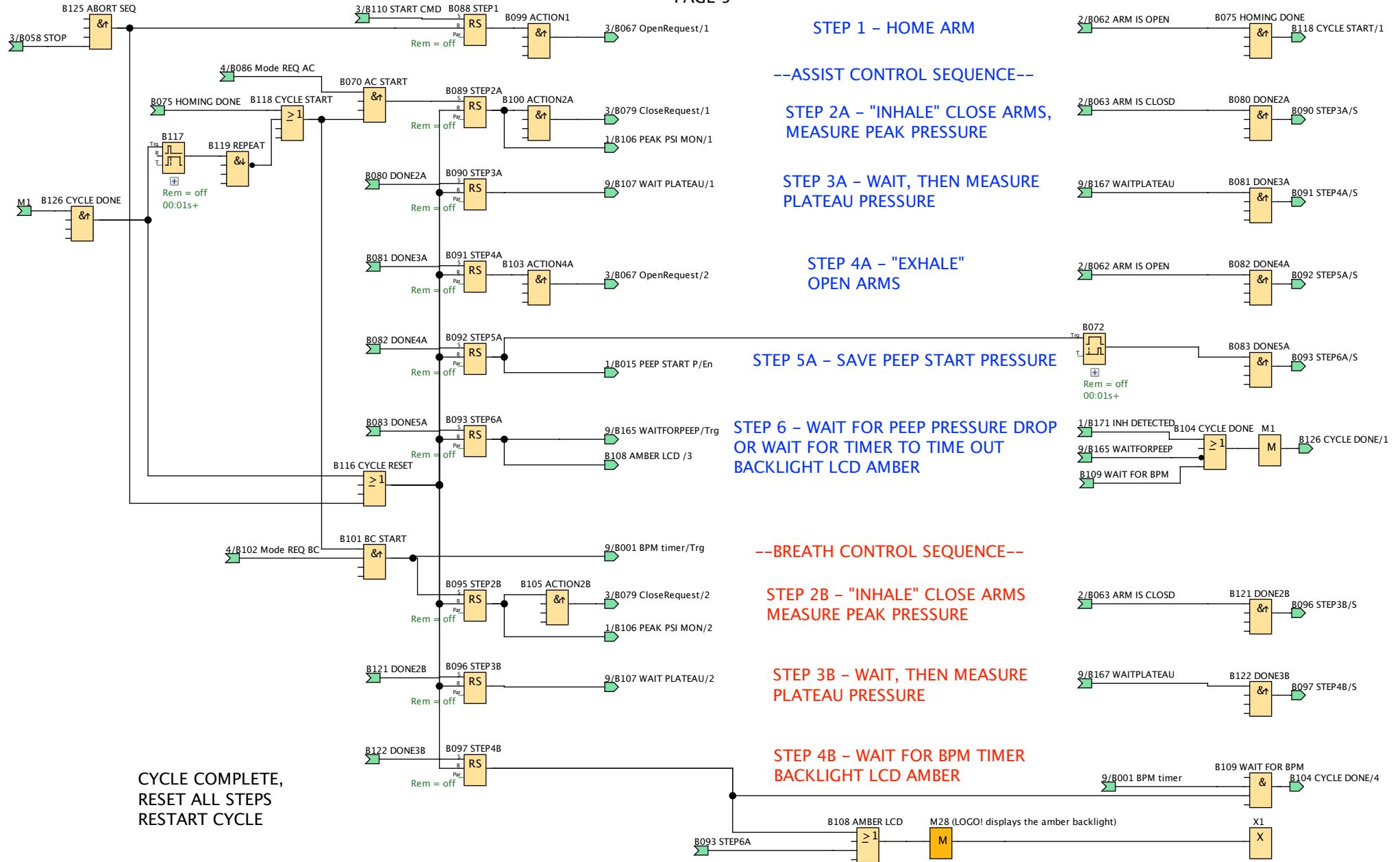
Mode 0 = Breath Cycle
Mode 1 = Assist Control



TICKTOCK



Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	4 / 33



STEP 1 - HOME ARM

--ASSIST CONTROL SEQUENCE--

STEP 2A - "INHALE" CLOSE ARMS, MEASURE PEAK PRESSURE

STEP 3A - WAIT, THEN MEASURE PLATEAU PRESSURE

STEP 4A - "EXHALE" OPEN ARMS

STEP 5A - SAVE PEEP START PRESSURE

STEP 6 - WAIT FOR PEEP PRESSURE DROP OR WAIT FOR TIMER TO TIME OUT BACKLIGHT LCD AMBER

--BREATH CONTROL SEQUENCE--

STEP 2B - "INHALE" CLOSE ARMS MEASURE PEAK PRESSURE

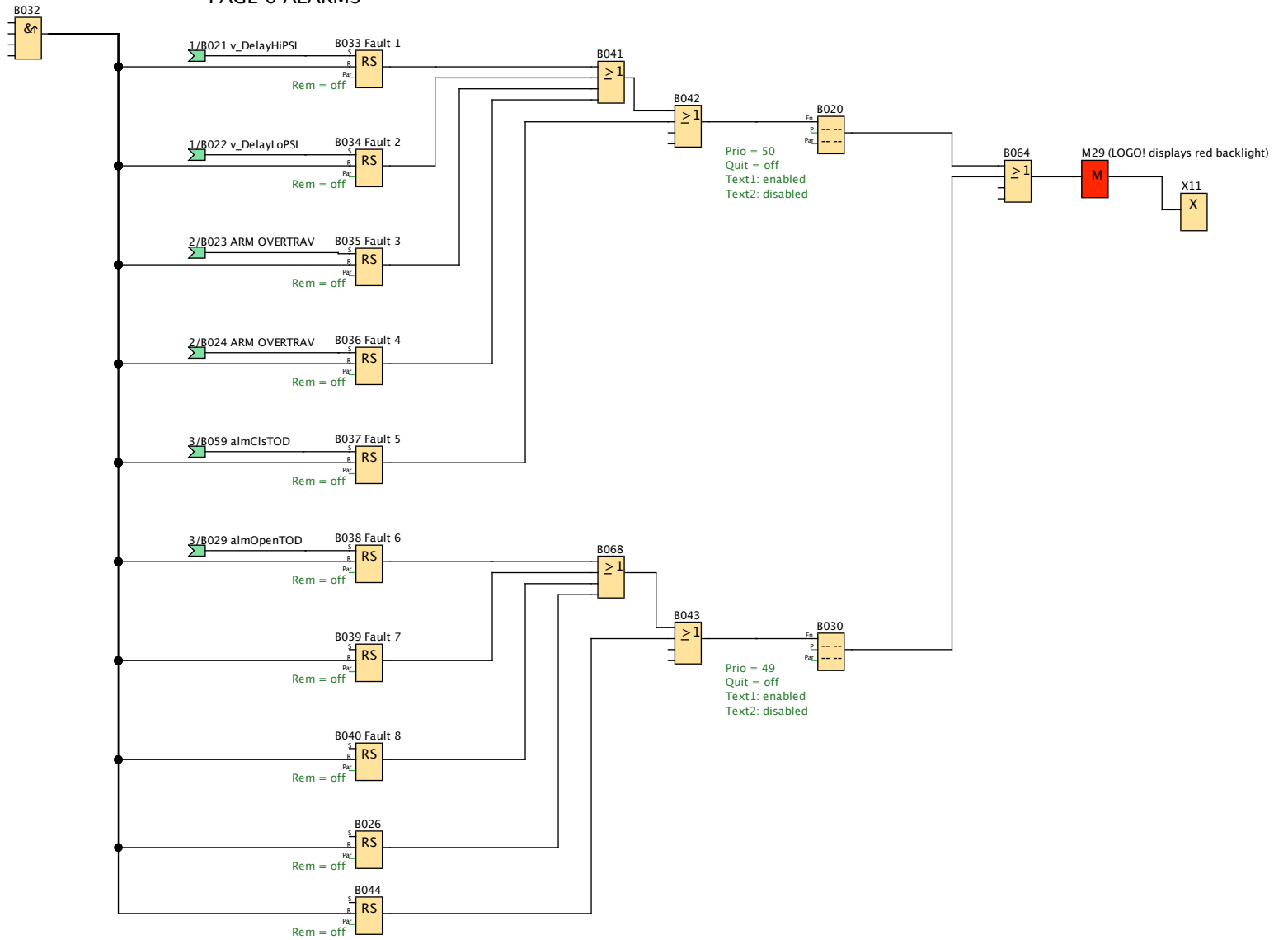
STEP 3B - WAIT, THEN MEASURE PLATEAU PRESSURE

STEP 4B - WAIT FOR BPM TIMER BACKLIGHT LCD AMBER

CYCLE COMPLETE, RESET ALL STEPS RESTART CYCLE

Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	5 / 33

PAGE 6 ALARMS

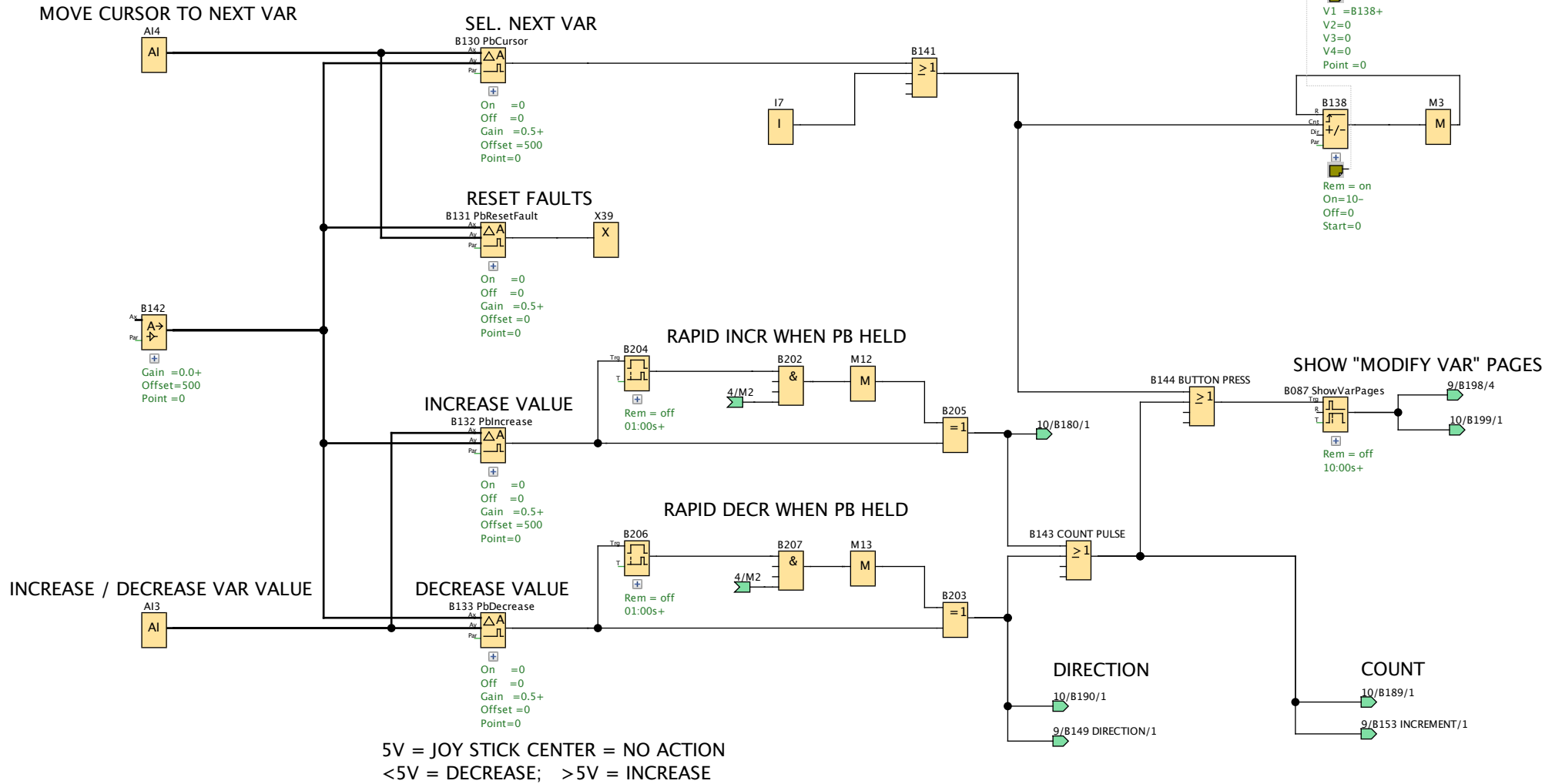


Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	6 / 33

Add counter for total breathing cycles since start
Add counter for pressure triggered breathing cycles since start
Add lifetime breathing cycles

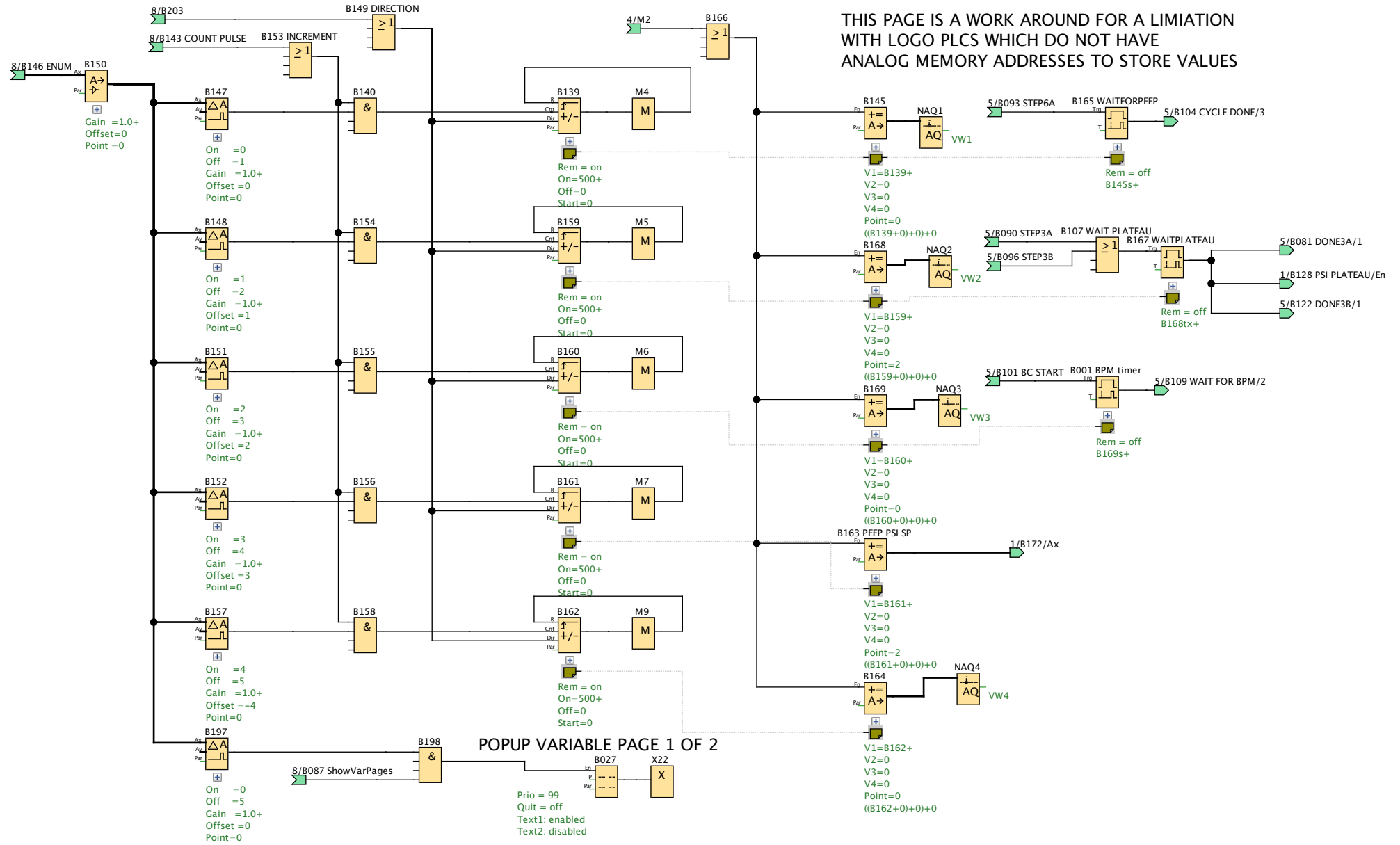
Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	7 / 33

PAGE 8
 4 WAY JOYSTICK CONTROL FOR MOVING CURSOR AND
 INCREASING DECREASING VARIABLE VALUES



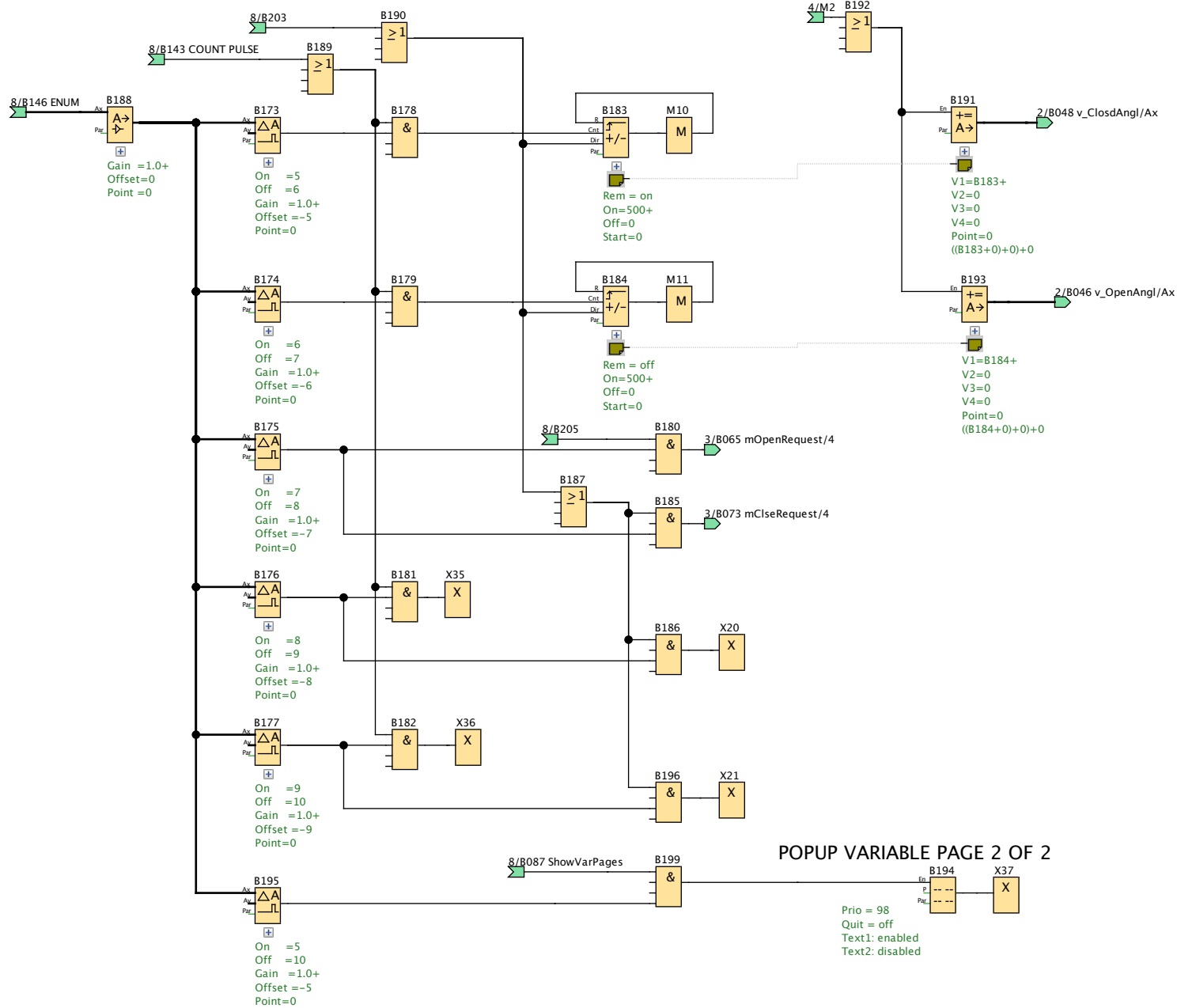
Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	8 / 33

THIS PAGE IS A WORK AROUND FOR A LIMITATION WITH LOGO PLCs WHICH DO NOT HAVE ANALOG MEMORY ADDRESSES TO STORE VALUES

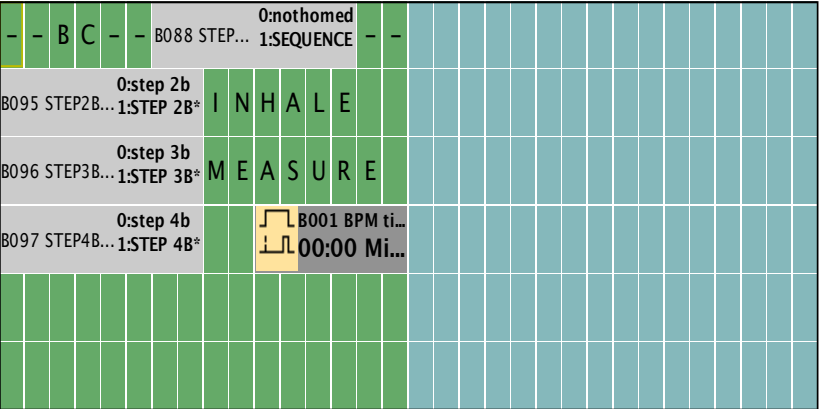


Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	9 / 33

PAGE 10. MORE TRIM ADJUSTMENTS. JOG ARM OPEN/CLOSE



Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	10 / 33

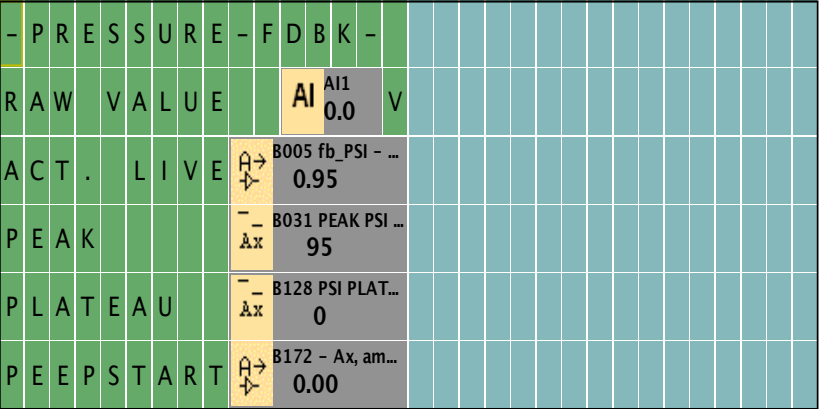
Block Number (Type)	Parameter
A11(Analog input) : Pressure 0-10V 0-1.45psi	
A12(Analog input) : ARM ANGLE 0-5V = 0-180 DEG	
A13(Analog input) : INCREASE / DECREASE VAR VALUE	
A14(Analog input) : MOVE CURSOR TO NEXT VAR	
B001 BPM timer(On-Delay) :	Rem = off B169s+
<p>B002 BREATH CNTRL(Message texts) :</p>  <p>--> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both</p> <p>Line1.7 IOStatus: B088 STEP1;Off="nothomed";On="SEQUENCE" Line2.1 IOStatus: B095 STEP2B;Off="step 2b";On="STEP 2B*" Line3.1 IOStatus: B096 STEP3B;Off="step 3b";On="STEP 3B*" Line4.1 IOStatus: B097 STEP4B;Off="step 4b";On="STEP 4B*" Line4.11 B001 BPM timer-TRest</p>	

Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	11 / 33

Block Number (Type)	Parameter																																																																										
<p>B004 MON INPUTS1(Message texts) :</p> <table border="1" data-bbox="129 304 943 715"> <tr> <td colspan="14">MONITOR - INPUTS - 1</td> </tr> <tr> <td>A 1</td><td>P</td><td>R</td><td>E</td><td>S</td><td>S</td><td>U</td><td>R</td><td>E</td><td>AI</td><td>AI1</td><td>0.0</td><td>V</td><td></td><td></td> </tr> <tr> <td>A 2</td><td>A</td><td>R</td><td>M</td><td>P</td><td>O</td><td>S</td><td>N</td><td>AI</td><td>AI2</td><td>0.0</td><td>V</td><td></td><td></td><td></td> </tr> <tr> <td>D 1</td><td>M</td><td>O</td><td>D</td><td>E</td><td>(</td><td>A</td><td>C</td><td>)</td><td>I1</td><td></td><td></td><td>0:OFF</td><td>1:ON</td><td></td> </tr> <tr> <td>D 2</td><td>R</td><td>U</td><td>N</td><td></td><td></td><td></td><td></td><td></td><td>I2</td><td></td><td></td><td>0:OFF</td><td>1:ON</td><td></td> </tr> </table> <p>Line2.12 AI: AI1 Line3.12 AI: AI2 Line4.14 IOStatus: I1;Off="OFF";On="ON" Line5.14 IOStatus: I2;Off="OFF";On="ON"</p>	MONITOR - INPUTS - 1														A 1	P	R	E	S	S	U	R	E	AI	AI1	0.0	V			A 2	A	R	M	P	O	S	N	AI	AI2	0.0	V				D 1	M	O	D	E	(A	C)	I1			0:OFF	1:ON		D 2	R	U	N						I2			0:OFF	1:ON		<p>Prio = 0 Quit = off Text1: enabled Text2: disabled</p> <p>--> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both</p>
MONITOR - INPUTS - 1																																																																											
A 1	P	R	E	S	S	U	R	E	AI	AI1	0.0	V																																																															
A 2	A	R	M	P	O	S	N	AI	AI2	0.0	V																																																																
D 1	M	O	D	E	(A	C)	I1			0:OFF	1:ON																																																														
D 2	R	U	N						I2			0:OFF	1:ON																																																														
<p>B005 fb_PSI(Analog Amplifier) :</p>	<p>Gain =0.19+ Offset=-37 Point =2</p>																																																																										
<p>B006(Analog Comparator) :</p>	<p>On =0 Off =0 Gain =1.0+ Offset =0 Point=0</p>																																																																										
<p>B007(Analog Amplifier) :</p>	<p>Gain =1.0+ Offset=0 Point =0</p>																																																																										

Block Number (Type)	Parameter
B008(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B009(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B010(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B011 v_HiLimPSI(Analog Amplifier) :	Gain =1.0+ Offset=140 Point =0
B012 v_HiLimAngle(Mathematic instruction) :	V1=499+ V2=0 V3=0 V4=0 Point=0 ((499+0)+0)+0
B013 v_LoLimPSI(Analog Amplifier) :	Gain =1.0+ Offset=2 Point =0
B014 v_LoLimAngle(Mathematic instruction) :	V1=2+ V2=0 V3=0 V4=0 Point=0 ((2+0)+0)+0

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	13 / 33

Block Number (Type)	Parameter
B015 PEEP START P(Max/Min) : RECORD PEEP STARTING PRESSURE	Rem = off Mode = 3 ResetMaxMin = false
B017(Message texts) :  Line2.12 AI: AI1 Line3.10 B005 fb_PSI-Ax Line4.10 B031 PEAK PSI MON-Max Line5.10 B128 PSI PLATEAU-Aq Line6.10 B172-Ax	Prio = 6 Quit = off Text1: enabled Text2: disabled --> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	14 / 33

Block Number (Type)	Parameter																		
<p>B027(Message texts) : POPUP VARIABLE PAGE 1 OF 2</p> <table border="1" data-bbox="129 304 945 715"> <thead> <tr> <th>MODIFY</th> <th>VALUE</th> <th>1 / 2</th> </tr> </thead> <tbody> <tr> <td>PeepTime</td> <td>+ B145 - Aq amp... 0</td> <td>B147 [Analog C... 0: 1:*</td> </tr> <tr> <td>PleatEAU</td> <td>+ B168 - Aq amp... 0.00</td> <td>B148 [Analog C... 0: 1:*</td> </tr> <tr> <td>CycleSec</td> <td>+ B169 - Aq amp... 0</td> <td>B151 [Analog C... 0: 1:*</td> </tr> <tr> <td>PeepPSI</td> <td>+ B163 PEEP PSI ... 0.00</td> <td>B152 [Analog C... 0: 1:*</td> </tr> <tr> <td></td> <td>+ B164 - Aq amp... 0</td> <td>B157 [Analog C... 0: 1:*</td> </tr> </tbody> </table> <p>Line2.9 B145-Aq Line2.16 IOStatus: B147;Off="";On="*" Line3.9 B168-Aq Line3.16 IOStatus: B148;Off="";On="*" Line4.9 B169-Aq Line4.16 IOStatus: B151;Off="";On="*" Line5.9 B163 PEEP PSI SP-Aq Line5.16 IOStatus: B152;Off="";On="*" Line6.9 B164-Aq Line6.16 IOStatus: B157;Off="";On="*"</p>	MODIFY	VALUE	1 / 2	PeepTime	+ B145 - Aq amp... 0	B147 [Analog C... 0: 1:*	PleatEAU	+ B168 - Aq amp... 0.00	B148 [Analog C... 0: 1:*	CycleSec	+ B169 - Aq amp... 0	B151 [Analog C... 0: 1:*	PeepPSI	+ B163 PEEP PSI ... 0.00	B152 [Analog C... 0: 1:*		+ B164 - Aq amp... 0	B157 [Analog C... 0: 1:*	<p>Prio = 99 Quit = off Text1: enabled Text2: disabled</p> <p>--> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both</p>
MODIFY	VALUE	1 / 2																	
PeepTime	+ B145 - Aq amp... 0	B147 [Analog C... 0: 1:*																	
PleatEAU	+ B168 - Aq amp... 0.00	B148 [Analog C... 0: 1:*																	
CycleSec	+ B169 - Aq amp... 0	B151 [Analog C... 0: 1:*																	
PeepPSI	+ B163 PEEP PSI ... 0.00	B152 [Analog C... 0: 1:*																	
	+ B164 - Aq amp... 0	B157 [Analog C... 0: 1:*																	
<p>B029 almOpenTOD(On-Delay) :</p>	<p>Rem = off 05:00s+</p>																		

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	18 / 33

Block Number (Type)	Parameter																																																																						
<p>B030(Message texts) :</p> <table border="1" data-bbox="125 300 943 711"> <tr> <td colspan="10">- A L A R M - S C R E E N - 2 -</td> </tr> <tr> <td>O P E N</td><td>T I M E O U T</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>B038 Fault 6 [...]</td> <td>0:OK 1:NOK</td> </tr> <tr> <td>F A U L T</td><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>B039 Fault 7 [...]</td> <td>0:OK 1:NOK</td> </tr> <tr> <td>F A U L T</td><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>B040 Fault 8 [...]</td> <td>0:OK 1:NOK</td> </tr> <tr> <td>F A U L T</td><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>B026 [Latchin...]</td> <td>0:OK 1:NOK</td> </tr> <tr> <td>F A U L T</td><td>1 0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td>B044 [Latchin...]</td> <td>0:OK 1:NOK</td> </tr> </table> <p>Line2.14 IOStatus: B038 Fault 6; Off="OK"; On="NOK" Line3.14 IOStatus: B039 Fault 7; Off="OK"; On="NOK" Line4.14 IOStatus: B040 Fault 8; Off="OK"; On="NOK" Line5.14 IOStatus: B026; Off="OK"; On="NOK" Line6.14 IOStatus: B044; Off="OK"; On="NOK"</p>	- A L A R M - S C R E E N - 2 -										O P E N	T I M E O U T									B038 Fault 6 [...]	0:OK 1:NOK	F A U L T	7									B039 Fault 7 [...]	0:OK 1:NOK	F A U L T	8									B040 Fault 8 [...]	0:OK 1:NOK	F A U L T	9									B026 [Latchin...]	0:OK 1:NOK	F A U L T	1 0									B044 [Latchin...]	0:OK 1:NOK	<p>Prio = 49 Quit = off Text1: enabled Text2: disabled</p> <p>--> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both</p>
- A L A R M - S C R E E N - 2 -																																																																							
O P E N	T I M E O U T									B038 Fault 6 [...]	0:OK 1:NOK																																																												
F A U L T	7									B039 Fault 7 [...]	0:OK 1:NOK																																																												
F A U L T	8									B040 Fault 8 [...]	0:OK 1:NOK																																																												
F A U L T	9									B026 [Latchin...]	0:OK 1:NOK																																																												
F A U L T	1 0									B044 [Latchin...]	0:OK 1:NOK																																																												
<p>B031 PEAK PSI MON(Max/Min) : RECORD PEAK INHALE PRESSURE</p>	<p>Rem = off Mode = 1 ResetMaxMin = false</p>																																																																						
<p>B032(AND (Edge)) : PAGE 6 ALARMS</p>																																																																							
<p>B033 Fault 1(Latching Relay) :</p>	<p>Rem = off</p>																																																																						
<p>B034 Fault 2(Latching Relay) :</p>	<p>Rem = off</p>																																																																						
<p>B035 Fault 3(Latching Relay) :</p>	<p>Rem = off</p>																																																																						
<p>B036 Fault 4(Latching Relay) :</p>	<p>Rem = off</p>																																																																						
<p>Creator:</p>	<p>Eric Tischer</p>	<p>Project:</p>	<p>DIY Ventilator</p>	<p>Customer:</p>	<p>OpenSource</p>																																																																		
<p>Checked:</p>		<p>Installation:</p>		<p>Diagram No.:</p>																																																																			
<p>Date:</p>	<p>3/28/20 2:00 PM/4/4/20 12:33 AM</p>	<p>File:</p>		<p>Page:</p>	<p>19 / 33</p>																																																																		

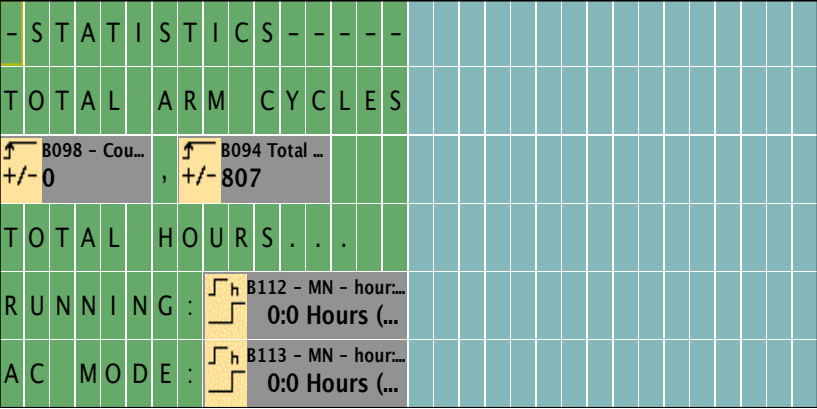
Block Number (Type)	Parameter
B047 v_MidAngle(Analog Amplifier) :	Gain =1.0+ Offset=0 Point =0
B048 v_ClostdAngl(Analog Amplifier) :	Gain =1.0+ Offset=0 Point =0
B049(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B050(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B051(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B053(Latching Relay) :	Rem = off
B054(Latching Relay) :	Rem = off
B059 almClstOD(On-Delay) :	Rem = off 05:00s+
B062 ARM IS OPEN(Latching Relay) : ARM IS OPEN	Rem = off
B063 ARM IS CLOSD(Latching Relay) : ARM IS CLOSED	Rem = off

Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource
Checked:		Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	21 / 33

Block Number (Type)	Parameter																																																																										
B072(On-Delay) :	Rem = off 00:01s+																																																																										
<p>B084 MON INPUTS 2(Message texts) :</p> <table border="1" data-bbox="129 395 943 807"> <tr> <td colspan="14">MONITOR - INPUTS - 2</td> </tr> <tr> <td>A 3</td><td>J</td><td>O</td><td>Y</td><td>S</td><td>T</td><td>I</td><td>C</td><td>K</td><td>AI</td><td>AI3</td><td>0.0</td><td>X</td><td></td><td></td> </tr> <tr> <td>A 4</td><td>J</td><td>O</td><td>Y</td><td>S</td><td>T</td><td>I</td><td>C</td><td>K</td><td>AI</td><td>AI4</td><td>0.0</td><td>Y</td><td></td><td></td> </tr> <tr> <td>D 3</td><td>J</td><td>O</td><td>Y</td><td>S</td><td>T</td><td>K</td><td>P</td><td>B</td><td>I3</td><td></td><td></td><td>0:OFF</td><td>1:ON</td><td></td> </tr> <tr> <td>D 4</td><td>S</td><td>P</td><td>A</td><td>R</td><td>E</td><td></td><td></td><td></td><td>I4</td><td></td><td></td><td>0:OFF</td><td>1:ON</td><td></td> </tr> </table> <p>Line2.12 AI: AI3 Line3.12 AI: AI4 Line4.14 IOStatus: I3;Off="OFF";On="ON" Line5.14 IOStatus: I4;Off="OFF";On="ON"</p>	MONITOR - INPUTS - 2														A 3	J	O	Y	S	T	I	C	K	AI	AI3	0.0	X			A 4	J	O	Y	S	T	I	C	K	AI	AI4	0.0	Y			D 3	J	O	Y	S	T	K	P	B	I3			0:OFF	1:ON		D 4	S	P	A	R	E				I4			0:OFF	1:ON		<p>Prio = 1 Quit = off Text1: enabled Text2: disabled</p> <p>--> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both</p>
MONITOR - INPUTS - 2																																																																											
A 3	J	O	Y	S	T	I	C	K	AI	AI3	0.0	X																																																															
A 4	J	O	Y	S	T	I	C	K	AI	AI4	0.0	Y																																																															
D 3	J	O	Y	S	T	K	P	B	I3			0:OFF	1:ON																																																														
D 4	S	P	A	R	E				I4			0:OFF	1:ON																																																														
B087 ShowVarPages(Off-Delay) :	Rem = off 10:00s+																																																																										
B088 STEP1(Latching Relay) :	Rem = off																																																																										
B089 STEP2A(Latching Relay) :	Rem = off																																																																										
B090 STEP3A(Latching Relay) :	Rem = off																																																																										
B091 STEP4A(Latching Relay) :	Rem = off																																																																										
B092 STEP5A(Latching Relay) :	Rem = off																																																																										
Creator:	Eric Tischer	Project:	DIY Ventilator	Customer:	OpenSource																																																																						
Checked:		Installation:		Diagram No.:																																																																							
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM	File:		Page:	22 / 33																																																																						

Block Number (Type)	Parameter
B093 STEP6A(Latching Relay) :	Rem = off
B094 Total cycles(Up/Down counter) :	Rem = off On=999999+ Off=0 Start=0
B095 STEP2B(Latching Relay) :	Rem = off
B096 STEP3B(Latching Relay) :	Rem = off
B097 STEP4B(Latching Relay) :	Rem = off
B098(Up/Down counter) :	Rem = off On=0+ Off=0 Start=0

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	23 / 33

Block Number (Type)	Parameter
<p>B111 stats(Message texts) :</p>  <p>Line3.1 B098-Cnt Line3.8 B094 Total cycles-Cnt Line5.9 B112-MN_h:m Line6.9 B113-MN_h:m</p>	<p>Prio = 2 Quit = off Text1: enabled Text2: disabled</p> <p>--> Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destination - Both</p>
<p>B112(Hours Counter) :</p>	<p>MI= 0h 0m+ OT= 0h 0m Q->0=R+En</p>
<p>B113(Hours Counter) :</p>	<p>MI= 0h 0m+ OT= 0h 0m Q->0=R+En</p>
<p>B117(Off-Delay) :</p>	<p>Rem = off 00:01s+</p>
<p>B128 PSI PLATEAU(Max/Min) : RECORD PLATEAU PRESSURE</p>	<p>Rem = off Mode = 0 ResetMaxMin = false</p>

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	24 / 33

Block Number (Type)	Parameter
B132 PbIncrease(Analog Comparator) : INCREASE VALUE	On =0 Off =0 Gain =0.5+ Offset =500 Point=0
B133 PbDecrease(Analog Comparator) : DECREASE VALUE	On =0 Off =0 Gain =0.5+ Offset =0 Point=0
B134(On-Delay) :	Rem = off 00:01s+
B135(On-Delay) :	Rem = off 00:01s+
B138(Up/Down counter) :	Rem = on On=10- Off=0 Start=0
B139(Up/Down counter) :	Rem = on On=500+ Off=0 Start=0
B142(Analog Amplifier) :	Gain =0.0+ Offset=500 Point =0
B145(Mathematic instruction) :	V1=B139+ V2=0 V3=0 V4=0 Point=0 ((B139+0)+0)+0

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	26 / 33

Block Number (Type)	Parameter
B146 ENUM(Analog MUX) : VARIABLE SELECTED ENUM	V1 =B138+ V2=0 V3=0 V4=0 Point =0
B147(Analog Comparator) :	On =0 Off =1 Gain =1.0+ Offset =0 Point=0
B148(Analog Comparator) :	On =1 Off =2 Gain =1.0+ Offset =1 Point=0
B150(Analog Amplifier) :	Gain =1.0+ Offset=0 Point =0
B151(Analog Comparator) :	On =2 Off =3 Gain =1.0+ Offset =2 Point=0
B152(Analog Comparator) :	On =3 Off =4 Gain =1.0+ Offset =3 Point=0
B157(Analog Comparator) :	On =4 Off =5 Gain =1.0+ Offset =-4 Point=0

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	27 / 33

Block Number (Type)	Parameter
B159(Up/Down counter) :	Rem = on On=500+ Off=0 Start=0
B160(Up/Down counter) :	Rem = on On=500+ Off=0 Start=0
B161(Up/Down counter) :	Rem = on On=500+ Off=0 Start=0
B162(Up/Down counter) :	Rem = on On=500+ Off=0 Start=0
B163 PEEP PSI SP(Mathematic instruction) :	V1=B161+ V2=0 V3=0 V4=0 Point=2 ((B161+0)+0)+0
B164(Mathematic instruction) :	V1=B162+ V2=0 V3=0 V4=0 Point=0 ((B162+0)+0)+0
B165 WAITFORPEEP(On-Delay) :	Rem = off B145s+
B167 WAITPLATEAU(On-Delay) :	Rem = off B168tx+

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	28 / 33

Block Number (Type)	Parameter
B168(Mathematic instruction) :	V1=B159+ V2=0 V3=0 V4=0 Point=2 ((B159+0)+0)+0
B169(Mathematic instruction) :	V1=B160+ V2=0 V3=0 V4=0 Point=0 ((B160+0)+0)+0
B171 INH DETECTED(Analog Comparator) : INHALE DETECTED	On =B172 Off =0 Gain =1.0+ Offset =0 Point=0
B172(Analog Amplifier) : PEEP PRESSURE DROP TRIGGER PSI	Gain =1.0+ Offset=0 Point =2
B173(Analog Comparator) :	On =5 Off =6 Gain =1.0+ Offset =-5 Point=0
B174(Analog Comparator) :	On =6 Off =7 Gain =1.0+ Offset =-6 Point=0
B175(Analog Comparator) :	On =7 Off =8 Gain =1.0+ Offset =-7 Point=0

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	29 / 33

Block Number (Type)	Parameter
B176(Analog Comparator) :	On =8 Off =9 Gain =1.0+ Offset =-8 Point=0
B177(Analog Comparator) :	On =9 Off =10 Gain =1.0+ Offset =-9 Point=0
B183(Up/Down counter) :	Rem = on On=500+ Off=0 Start=0
B184(Up/Down counter) :	Rem = off On=500+ Off=0 Start=0
B188(Analog Amplifier) :	Gain =1.0+ Offset=0 Point =0
B191(Mathematic instruction) :	V1=B183+ V2=0 V3=0 V4=0 Point=0 ((B183+0)+0)+0
B193(Mathematic instruction) :	V1=B184+ V2=0 V3=0 V4=0 Point=0 ((B184+0)+0)+0

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	30 / 33

Block Number (Type)	Parameter
B200(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B201(Analog Comparator) :	On =0 Off =0 Gain =1.0+ Offset =0 Point=0
B204(On-Delay) :	Rem = off 01:00s+
B206(On-Delay) :	Rem = off 01:00s+
I1(Input) : Mode 0 = Breath Cycle Mode 1 = Assist Control	
I2(Input) : RUN PB	
I3(Input) : MAN. OPEN PB	
I4(Input) : MAN. CLOSE PB	
I5(Input) : ESTOP PB	
M2(Flag) : TICKTOCK	
Q1(Output) : OPEN ARM	

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	32 / 33

Block Number (Type)	Parameter
Q2(Output) : CLOSE ARM	

--	--	--	--	--	--

Creator:	Eric Tischer		Project:	DIY Ventilator	Customer:	OpenSource
Checked:			Installation:		Diagram No.:	
Date:	3/28/20 2:00 PM/4/4/20 12:33 AM		File:		Page:	33 / 33