

**Comment**

counters have contact bounce buffer control in place  
 3-2-18 added a lot of gogo gate sht clock stuff  
 redwnlded prgrm 10-16-18 IP address 192.168.20.38  
 10-16-18 counts were mach start 18, mach stop 6, jing 894, sdr 2719, ndr 2575, ex fn cnt 4772,  
 ex fn hrs 153hrs 26min, reset all to zero  
 1-4-19 counts were mch srt btn 5, mstop 0, jing btn 514, south dr 811, north door 847, ex fan cnt 1485, could not reset fan  
 hrs??, titened terms and strtn up wires in smart box and watch cabinet, yes, and there is a sd card in this smart slot now,  
 assumed program was on it  
 5-5-20 1:30pm established remote contact w/ this smart relay/yes, and counters read, MStrt 43, Mstop 7, Jing pb 3112,  
 South dr cntr 5410, Northdr cntr 4845, Ex fan cntr 9264, Ex fan hrs 347 hrs 41 min, did not reset any to zero beause do not  
 think can do remotely w/out entire redwnld, jostled counters so I could read and added this text here, chnged date on prgrm  
 text sheet and after still could establish remote contact /yes  
 9-14-20 established full remote radwin contact from lineshop, perfect, counters read Mstrpbtn 51, Mstopcnt 10, Jingpbcnt  
 4202, south dr cntr 6946, north dr cntr 6171, Ex fan ctr 11846, exfan hrs 431:01, redwnld w/ more counters, reset all cntrs  
 to zero, including hrs  
 9-23-20 cntrs read,mstr 1, mstop 0, jing 70, sdr cnt 100, ndrcnt 94, exfancnt 180, exfanhrs 5hr 45min, rigfanonsw 0,  
 rigfantmdsw 0, sodrrec 0, ndrrec 166, pulsesdr 0, ndr pulse 163, redwnld all counts to zero, because slowed down flash  
 on backuplight to save relay  
 1-8-21 slowed down flash on backup lt, added MOV, read 25 volts, all done  
 9-10-21 cannot est radwin contact, says programs are not identical  
 9-13-21 counts read MSpbcn 87, mstpbcn 27, jingpbcn 6601, sdr cntr 10891, Ndr cntr 9599, Exfancnt 18592, Exfanhrs  
 648:02, I could not get saved lnshp prgrm to remote so uploaded station prgrm and got these counts, then redwnlded  
 saved prgrm after compare, then remote is good all counts to zero, not sure zero  
 5-3-22 counters read MS pb cn 102, mstp bcn 29, Jing pbc 7503, Sdr cntr 12809, Ndr cntr 11157, Exfancnt 21800,  
 Exfanhrs 751h 2m, all counts to zero redwnlded remotely, city IP installed, MOV verified yes, online tests good

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	1 / 20

## Module Address

IP Address 10.126.165.101  
Subnet Mask: 255.255.255.240  
Default gateway 10.126.165.97

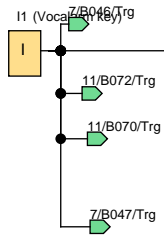
Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	2 / 20

# STATION 38 - VOCALARM, MACHINE START, MACHINE STOP, JINGLER SECTION 5-3-22

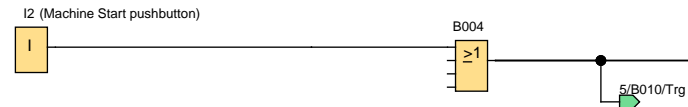
City IP address 10.126.165.101  
 255.255.255.240  
 10.126.165.97

## INPUTS

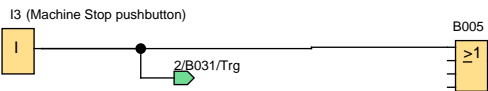
### I1-Vocalarm key



### I2-Machine Start Pushbutton



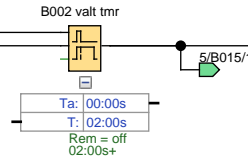
### I3-Machine Stop Pushbutton



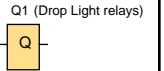
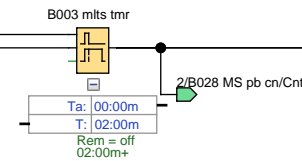
## OUTPUTS

Q1-Drop Light relays-dorm rooms

Vocalarm lights timer



Machine Start dorm lights timer

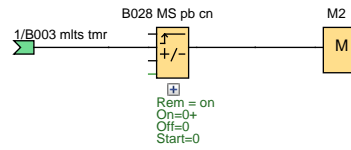


Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	3 / 20

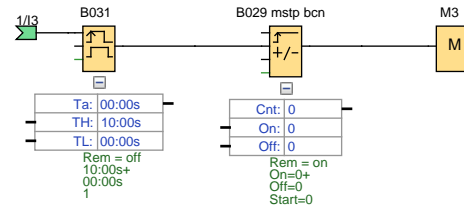
# Sta 38

## Counting Section

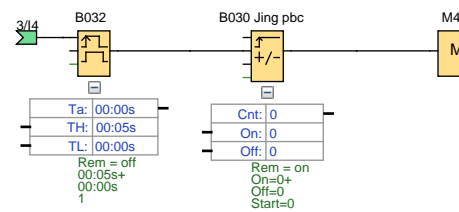
Mach strt pshbtn cntr



Mach Stop pshbtn cntr



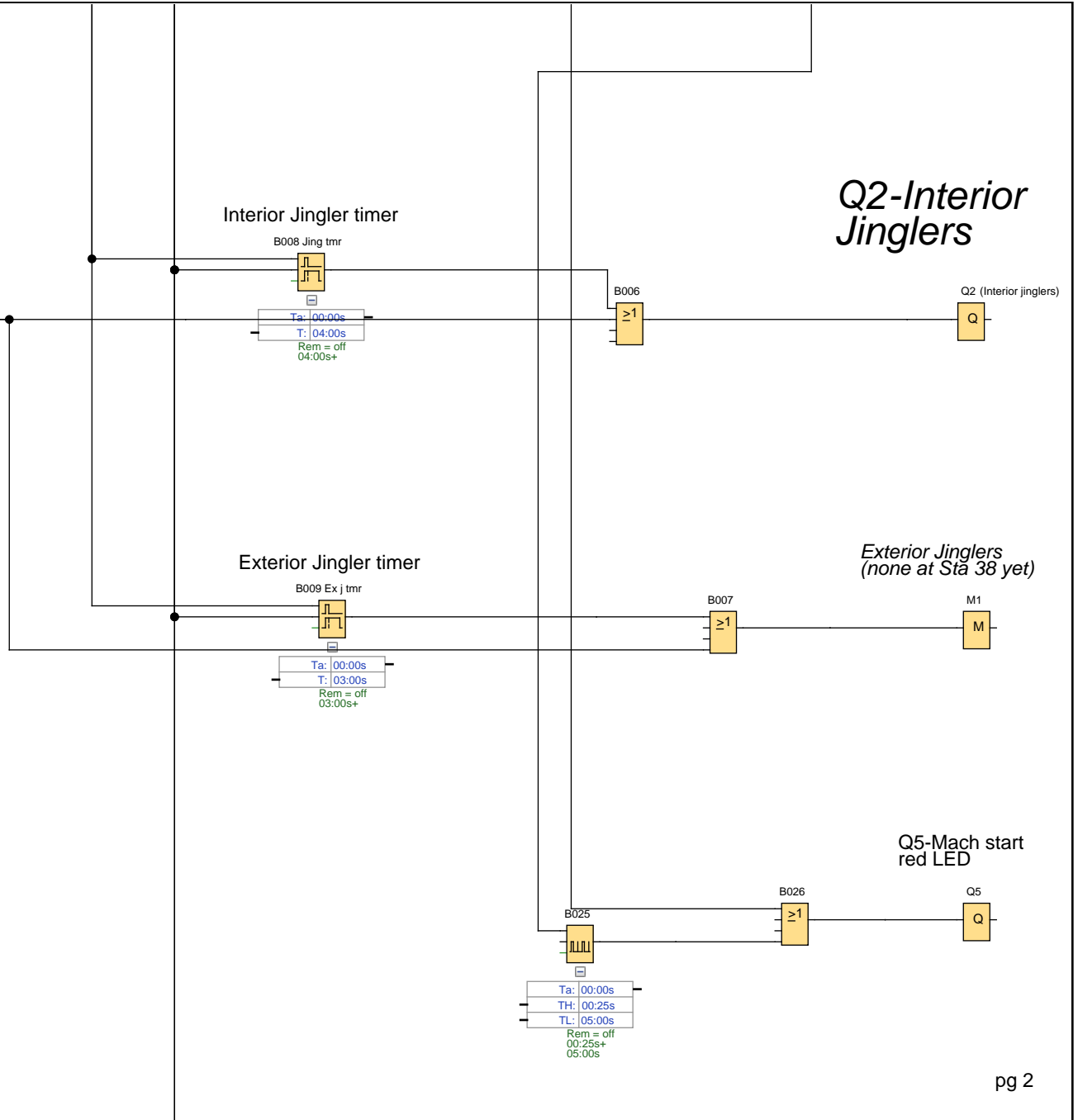
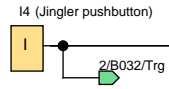
Jing pshbtn cntr



Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	4 / 20

# Sta 38

## I4-Jingler Pushbutton



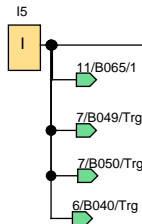
Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	5 / 20

# Sta 38

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	6 / 20

# STA 38-Door controls section

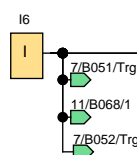
I5-South garage door limit switch



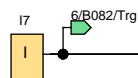
Lot: W104°59'20"+  
 Lat: N39°37'45"  
 TZ: -7  
 Sunrise offset: 20  
 Sunset offset: -20



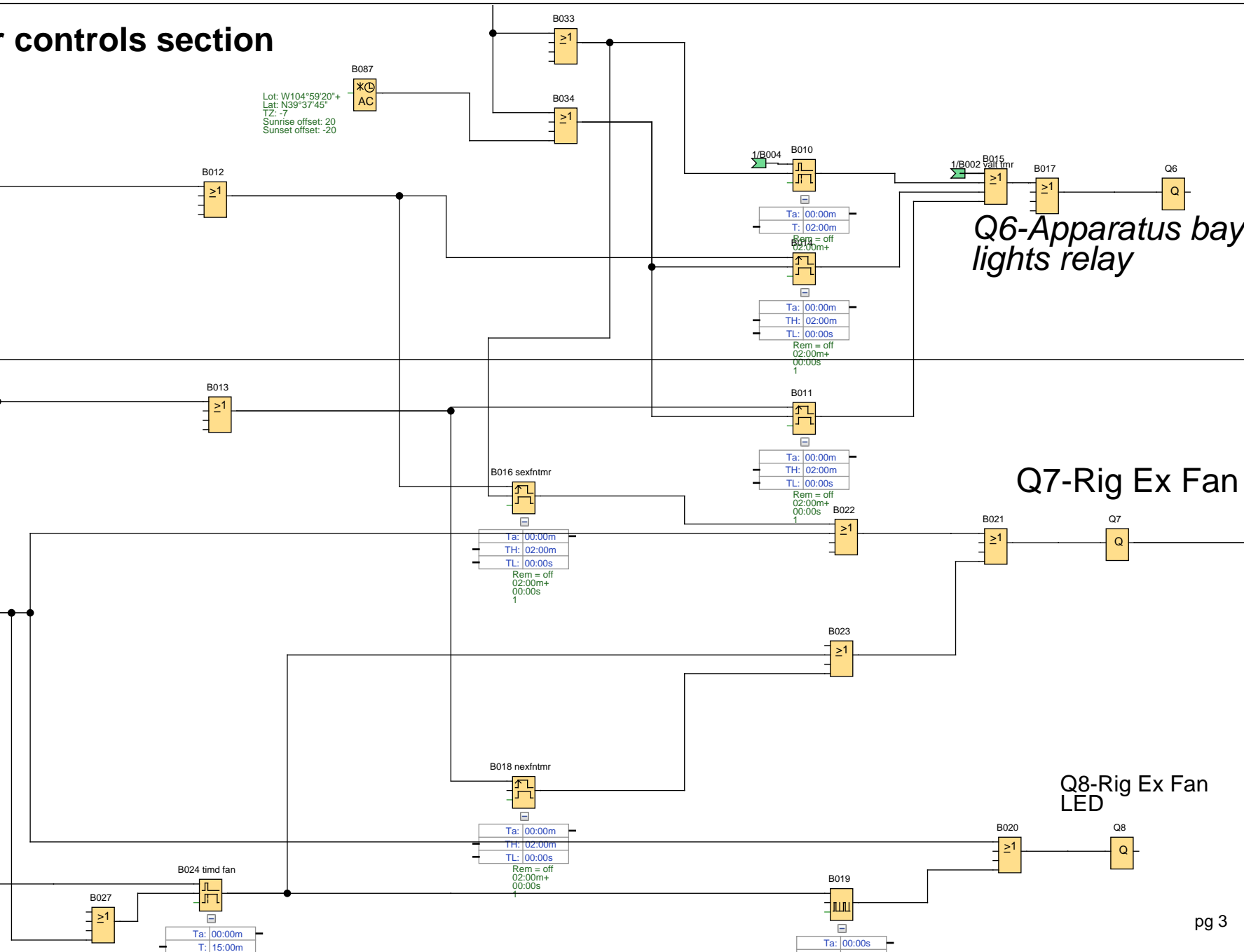
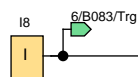
I6-North garage door limit switch



I7-Rig Ex fan "ON"



I8-Rig ex fan "timed off"



Q6-Apparatus bay lights relay

Q7-Rig Ex Fan

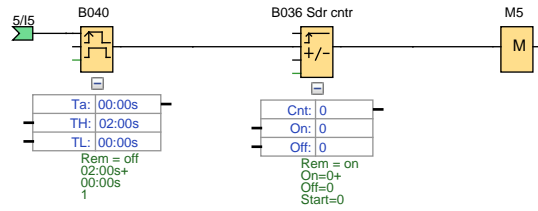
Q8-Rig Ex Fan LED

Creator:	Muniz-jbl	DFD Lineshop	Project:	Sta 38	Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	7 / 20

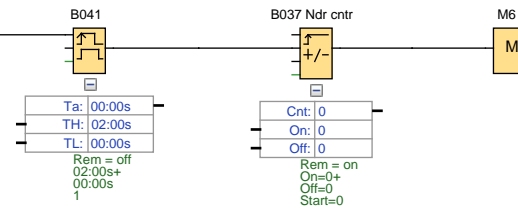
# Sta 38

# Counting Section

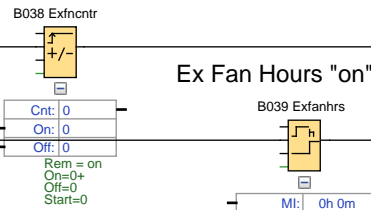
## South Door Counter



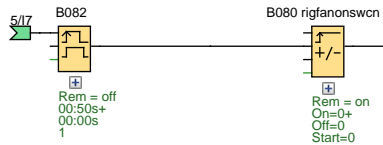
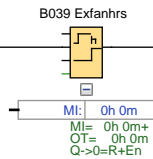
## North Door Counter



## Ex Fan Counter



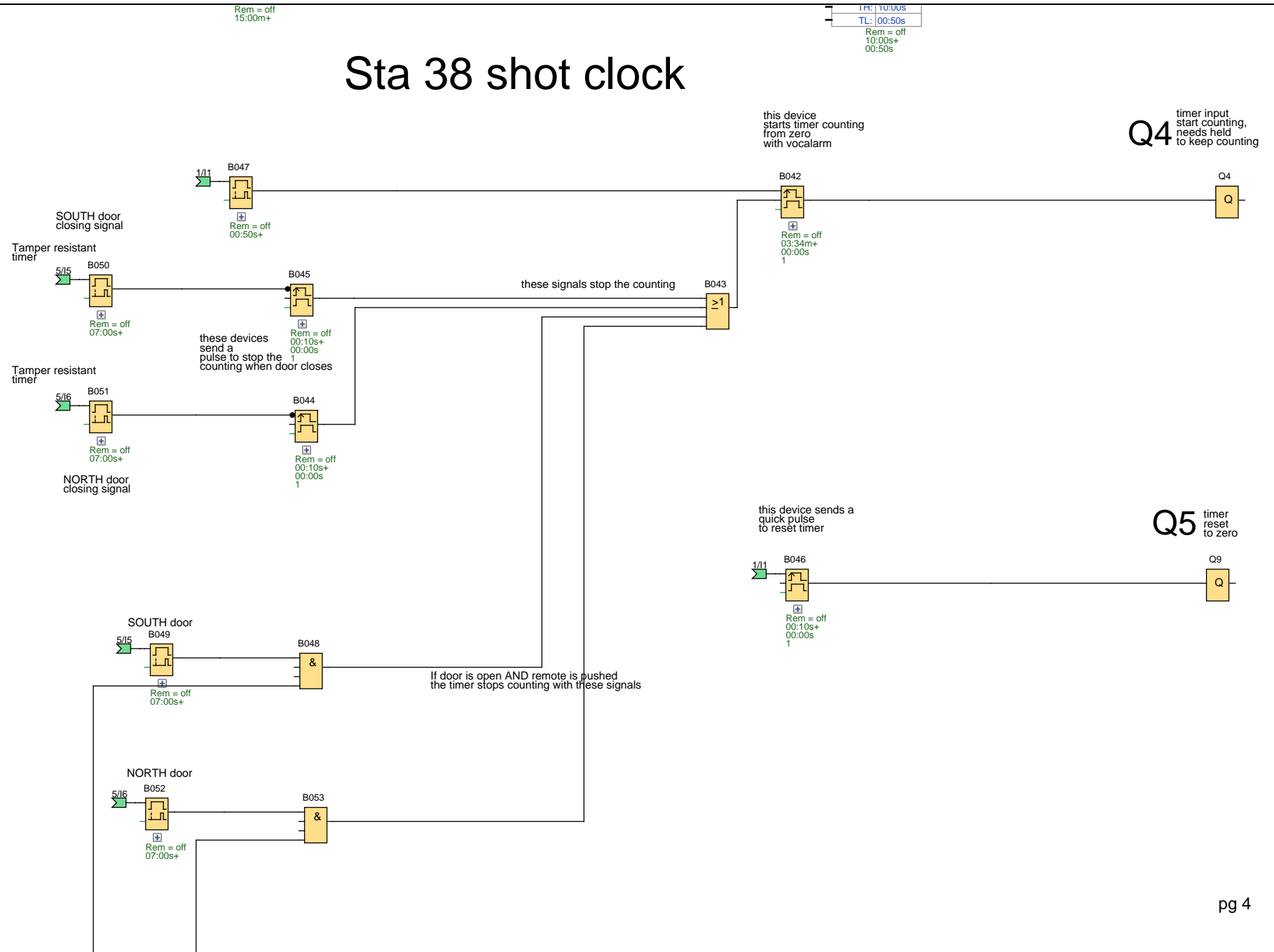
## Ex Fan Hours "on" time



Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	8 / 20



# Sta 38 shot clock

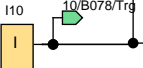


Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	9 / 20

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	10 / 20

# STA 38 Door Reciever Pulse Section

I10-SOUTH door-receiver



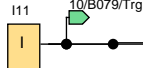
10/B078/Trg

This keeps engineer from repeat remote pushing



Rem = off  
01:50s+  
00:00s  
1

I11-NORTH door-receiver



10/B079/Trg

This keeps engineer from repeat remote pushing



Rem = off  
01:50s+  
00:00s  
1



Rem = off  
00:50s+  
00:00s  
1



Rem = off  
00:50s+  
00:00s  
1

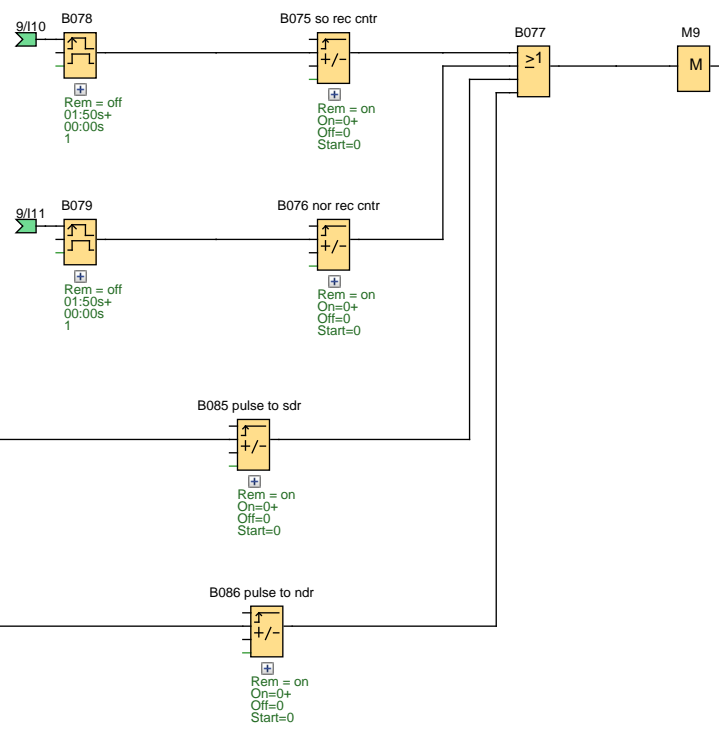
Q10-To south door



Q11-To north door



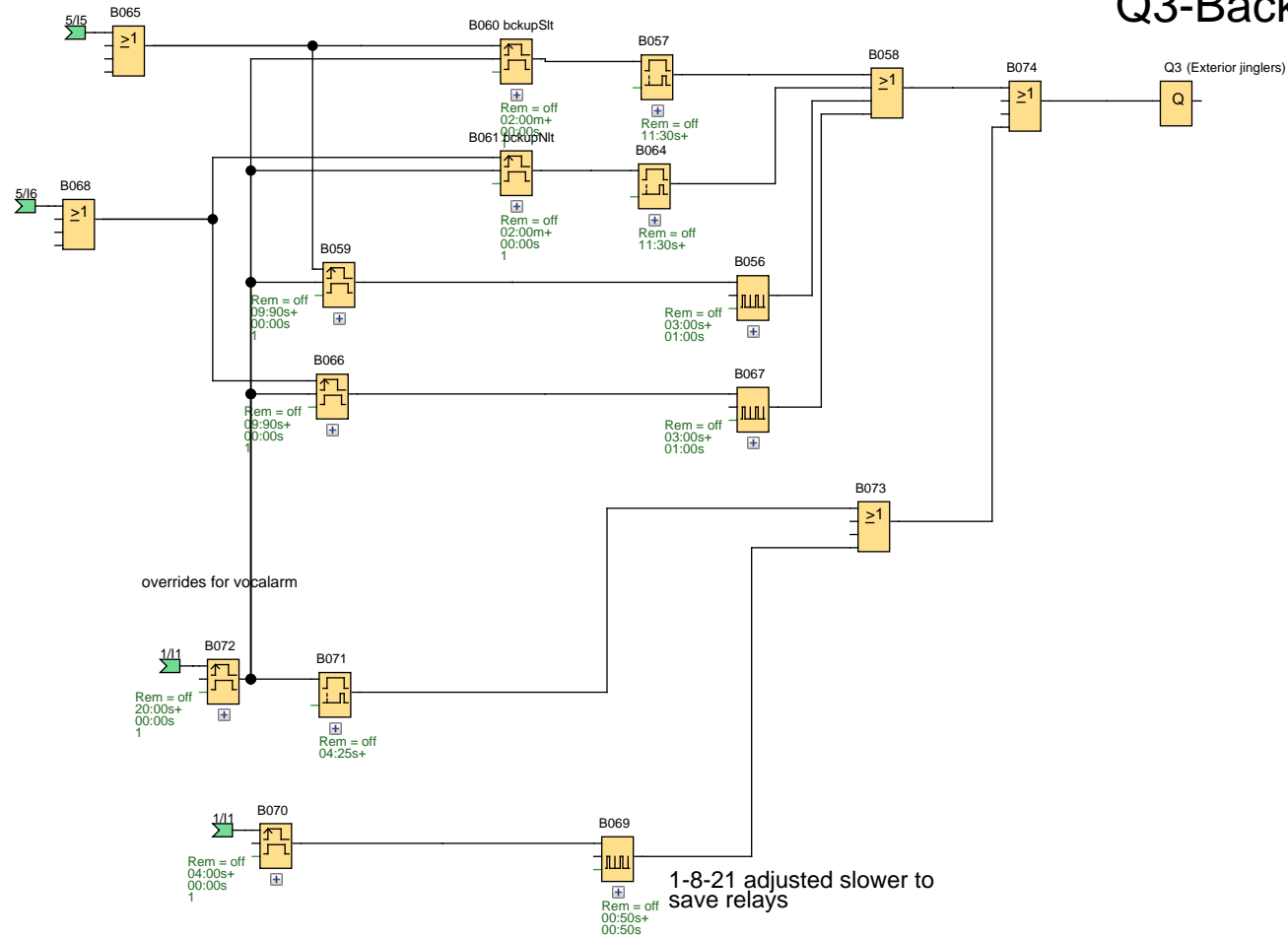
Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	11 / 20



Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	12 / 20

# Sta 38 LED BACKING LIGHTS

## Q3-Back up LED lights



Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	13 / 20

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	14 / 20

Block Number (Type)	Parameter
B002 valt tmr(Off-delay) : Vocalarm lights timer	Rem = off 02:00s+
B003 mlts tmr(Off-delay) : Machine Start dorm lights timer	Rem = off 02:00m+
B008 Jing tmr(Off-delay) : Interior Jingly timer	Rem = off 04:00s+
B009 Ex j tmr(Off-delay) : Exterior Jingly timer	Rem = off 03:00s+
B010(Off-delay) :	Rem = off 02:00m+
B011(Edge-triggered interval time-delay relay) :	Rem = off 02:00m+ 00:00s 1
B014(Edge-triggered interval time-delay relay) :	Rem = off 02:00m+ 00:00s 1
B016 sexfntmr(Edge-triggered interval time-delay relay) :	Rem = off 02:00m+ 00:00s 1
B018 nexfntmr(Edge-triggered interval time-delay relay) :	Rem = off 02:00m+ 00:00s 1
B019(Asynchronous pulse generator) :	Rem = off 10:00s+ 00:50s
B024 timd fan(Off-delay) :	Rem = off 15:00m+
B025(Asynchronous pulse generator) :	Rem = off 00:25s+ 05:00s
B028 MS pb cn(Up/Down counter) : Mach strt pshbtn cntr	Rem = on On=0+ Off=0 Start=0
B029 mstp bcn(Up/Down counter) : Mach Stop pshbtn cntr	Rem = on On=0+ Off=0 Start=0
B030 Jing pbc(Up/Down counter) : Jing pshbtn cntr	Rem = on On=0+ Off=0 Start=0
B031(Edge-triggered interval time-delay relay) :	Rem = off 10:00s+ 00:00s 1
B032(Edge-triggered interval time-delay relay) :	Rem = off 00:05s+ 00:00s 1
B036 Sdr cntr(Up/Down counter) : South Door Counter	Rem = on On=0+ Off=0 Start=0
B037 Ndr cntr(Up/Down counter) : North Door Counter	Rem = on On=0+ Off=0 Start=0
B038 Exfncntr(Up/Down counter) : Ex Fan Counter	Rem = on On=0+ Off=0 Start=0

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	15 / 20

Block Number (Type)	Parameter
B039 Exfanhrs(Operating hours counter ) : Ex Fan Hours "on" time	ML= 0h 0m+ OT= 0h 0m Q->0=R+En
B040(Edge-triggered interval time-delay relay) :	Rem = off 02:00s+ 00:00s 1
B041(Edge-triggered interval time-delay relay) :	Rem = off 02:00s+ 00:00s 1
B042(Edge-triggered interval time-delay relay) : this device starts timer counting from zero with vocalarm	Rem = off 03:34m+ 00:00s 1
B044(Edge-triggered interval time-delay relay) : these devices send a pulse to stop the counting when door closes	Rem = off 00:10s+ 00:00s 1
B045(Edge-triggered interval time-delay relay) :	Rem = off 00:10s+ 00:00s 1
B046(Edge-triggered interval time-delay relay) : this device sends a quick pulse to reset timer	Rem = off 00:10s+ 00:00s 1
B047(On-delay) :	Rem = off 00:50s+
B049(On-delay) :	Rem = off 07:00s+
B050(On-delay) :	Rem = off 07:00s+
B051(On-delay) :	Rem = off 07:00s+
B052(On-delay) :	Rem = off 07:00s+
B054(Edge-triggered interval time-delay relay) : This keeps engineer from repeat remote pushing	Rem = off 01:50s+ 00:00s 1
B055(Edge-triggered interval time-delay relay) : This keeps engineer from repeat remote pushing	Rem = off 01:50s+ 00:00s 1
B056(Asynchronous pulse generator) :	Rem = off 03:00s+ 01:00s
B057(On-delay) :	Rem = off 11:30s+
B059(Edge-triggered interval time-delay relay) :	Rem = off 09:90s+ 00:00s 1
B060 bckupSlT(Edge-triggered interval time-delay relay) :	Rem = off 02:00m+ 00:00s 1
B061 bckupNlt(Edge-triggered interval time-delay relay) :	Rem = off 02:00m+ 00:00s 1
B062 Spulse(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	16 / 20



Block Number (Type)	Parameter
B063 Npulse(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1
B064(On-delay) :	Rem = off 11:30s+
B066(Edge-triggered interval time-delay relay) :	Rem = off 09:90s+ 00:00s 1
B067(Asynchronous pulse generator) :	Rem = off 03:00s+ 01:00s
B069(Asynchronous pulse generator) :	Rem = off 00:50s+ 00:50s
B070(Edge-triggered interval time-delay relay) :	Rem = off 04:00s+ 00:00s 1
B071(On-delay) :	Rem = off 04:25s+
B072(Edge-triggered interval time-delay relay) :	Rem = off 20:00s+ 00:00s 1
B075 so rec cntr(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B076 nor rec cntr(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B078(Edge-triggered interval time-delay relay) :	Rem = off 01:50s+ 00:00s 1
B079(Edge-triggered interval time-delay relay) :	Rem = off 01:50s+ 00:00s 1
B080 rigfanonswcn(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B081 rigfantmdcnt(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B082(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1
B083(Edge-triggered interval time-delay relay) :	Rem = off 00:50s+ 00:00s 1
B085 pulse to sdr(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0
B086 pulse to ndr(Up/Down counter) :	Rem = on On=0+ Off=0 Start=0

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	17 / 20

Block Number (Type)	Parameter
B087(Astronomical clock) :	Lot: W104°59'20"+ Lat: N39°37'45" TZ: -7 Sunrise offset: 20 Sunset offset: -20
I1(Input) : I1-Vocalarm key	
I2(Input) : I2-Machine Start Pushbutton	
I3(Input) : I3-Machine Stop Pushbutton	
I4(Input) : I4-Jingler Pushbutton	
I5(Input) : I5-South garage door limit switch	
I6(Input) : I6-North garage door limit switch	
I7(Input) : I7-Rig Ex fan "ON"	
I8(Input) : I8-Rig ex fan "timed off"	
I10(Input) : I10-SOUTH door- receiver	
I11(Input) : I11-NORTH door- receiver	
Q1(Output) : Q1-Drop Light relays-dorm rooms	
Q2(Output) : Q2-Interior Jinglers	
Q3(Output) : Q3-Back up LED lights	
Q4(Output) : Q4-timer input start counting, needs held to keep counting	
Q5(Output) : Q5-Mach start red LED	
Q6(Output) : Q6-Apparatus bay lights relay	
Q7(Output) : Q7-Rig Ex Fan	
Q8(Output) : Q8-Rig Ex Fan LED	
Q9(Output) : Q9-timer reset to zero	
Q10(Output) : Q10-To south door	

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	18 / 20

Block Number (Type)	Parameter
Q11(Output) : Q11-To north door	

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

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	19 / 20

Connection	Label
I1	Vocalarm key
I2	Machine Start pushbutton
I3	Machine Stop pushbutton
I4	Jingler pushbutton
I5	
I6	
I7	
I8	
I10	
I11	
M1	
M2	
M3	
M4	
M5	
M6	
M7	
M9	
Q1	Drop Light relays
Q2	Interior jinglers
Q3	Exterior jinglers
Q4	
Q5	
Q6	
Q7	
Q8	
Q9	
Q10	
Q11	

Creator:	Muniz-jbl	DFD Lineshop	Project:		Customer:	Denver Fire Dept.
Checked:	5-3-22		Installation:	Sta 38	Diagram No.:	
Date:	5/11/15 7:07 AM/6/10/22 9:25 AM		File:	STA 38vamsdrs 5-3-22.lsc	Page:	20 / 20