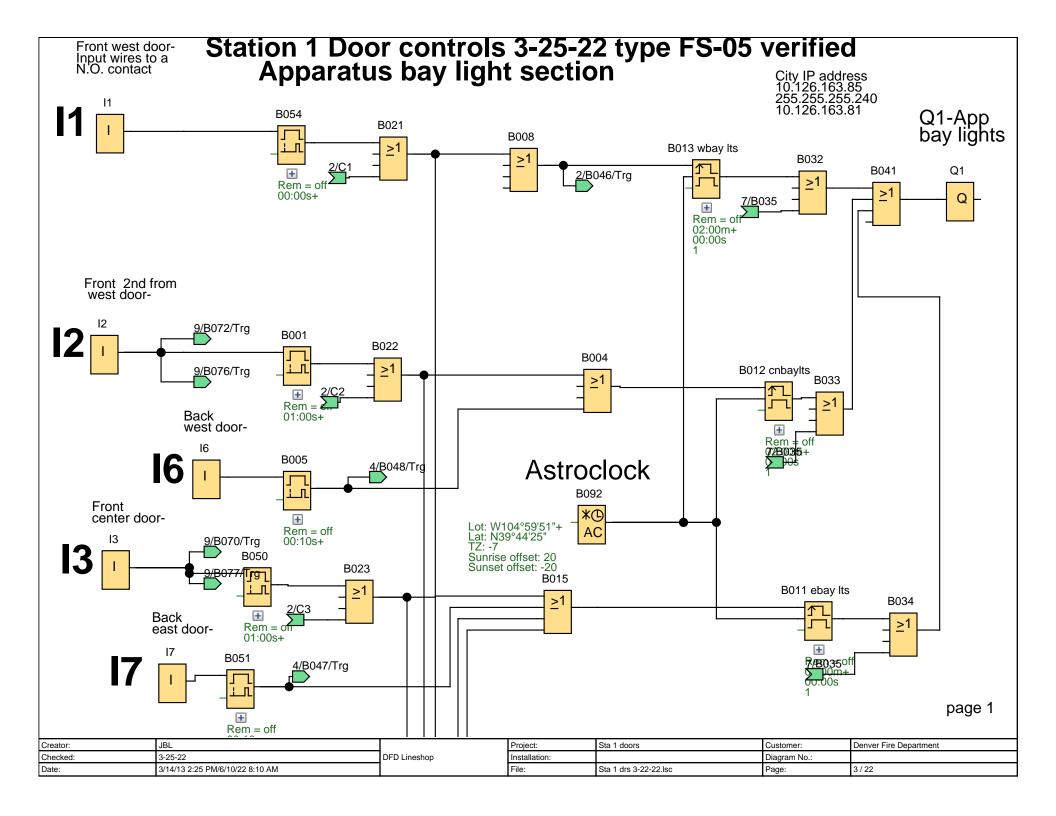
## Comment 8-24-18 added on delay .25 sec at pulses, because black receivers vibrating "ON", seen first hand 2-5-19 added AES current sensor, and dwnlded prgrm 2-5-19 counters read bckwest 19611, frnteast 825, f2eastdr 1334, exfanhrs 1334h 5m, backeast 19611, exfancnt 24630, ftrkcntr 11669, fpumpcnt 13899, reset all to zero, yes 3-22-22 verified type FS-05, installed dity IP address, and dwnlded and saved to card, all online tests good counts read fwdrcont 0, fpumpcnt 4206, ftrkcntr 12046, exfancnt 16683, backeast 9757, exfanhrs 1154h 4m, f2eastdr 1381, frnteast 0, backwest 9757, fnoncnt 16683, fncrcnt 16664, aesoutcn 24, all counts to zero 3-25-22 REDWNLDED LOST COUNTS, all to zero Creator: JBL Project: Sta 1 doors Customer: Denver Fire Department Checked: 3-25-22 DFD Lineshop Installation: Diagram No.: Date: 3/14/13 2:25 PM/6/10/22 8:10 AM File: Sta 1 drs 3-22-22.lsc Page: 1/22

## **Module Address** IP Address Subnet Mask: Default gateway 10.126.163.85 255.255.255.240 10.126.163.81 Creator: Project: Customer: Denver Fire Department Sta 1 doors 3-25-22 Installation: Diagram No.: Checked: DFD Lineshop 3/14/13 2:25 PM/6/10/22 8:10 AM File: Date: Sta 1 drs 3-22-22.lsc Page: 2/22



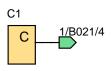
#### Station 1

# **CURSOR SECTION**

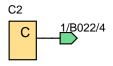
# COUNTING SECTION

#### MESSAGE SECTION

## Simulates front west door opening



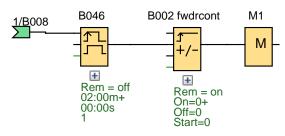
## Simulates front 2nd frm west door opening



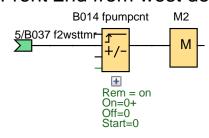
#### Simulates front center door opening

C3 1/B023/4

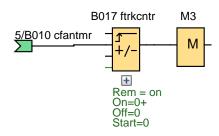
#### Front west door



#### Front 2nd from west door

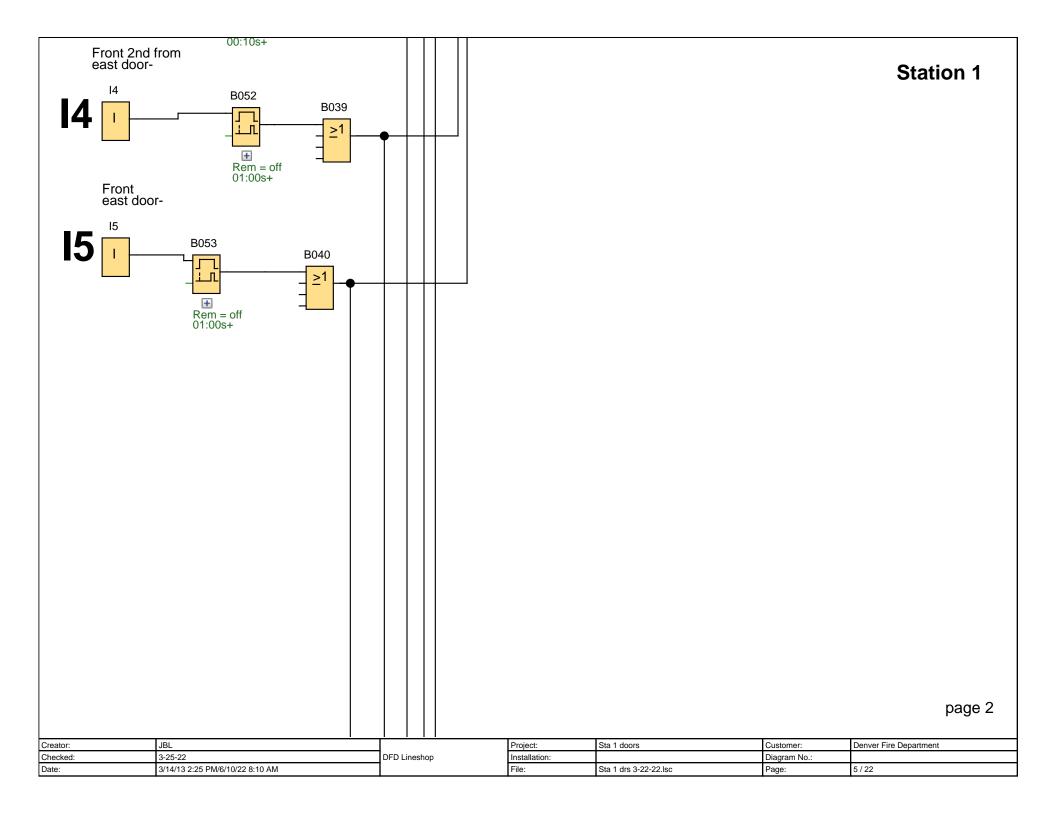


#### Front center door



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С	Creator:	JBL		Project:	ct: Sta 1 doors C		Denver Fire Department
С	Checked:	3-25-22	DFD Lineshop	Installation:		Diagram No.:	
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#### Front 2nd from east door Station 1 B027 f2eastdr M8 (Initialization Flag) 5/B007 f2esttmr Rem = on On=0+ Off=0 Front east door Start=0 М9 B029 frnteast 5/B009 efan tmr M + Rem = on On=0+ Off=0 Start=0 Back center door B019 backeast M5 B047 1/B051 M

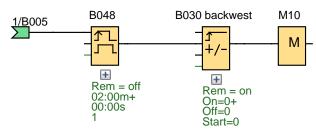
## + +

Rem = on On=0+ Off=0 Start=0

#### Back west door

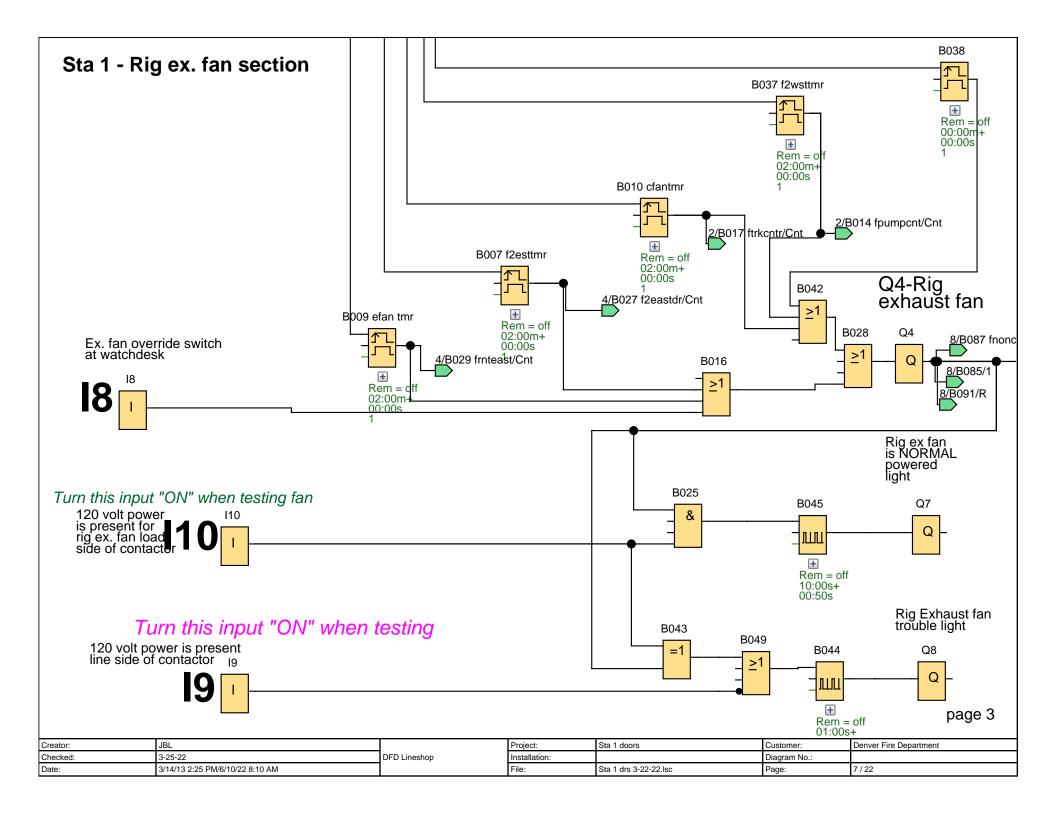
Rem = off

02:00m+ 00:00s



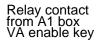
page 8

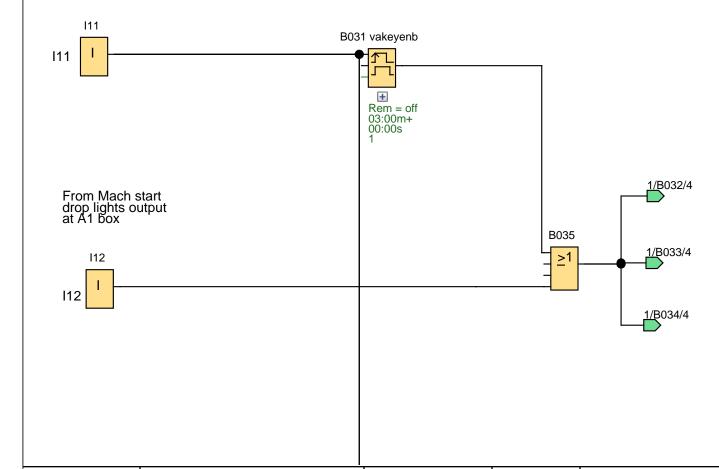
Creator:	JBL		Project:	Sta 1 doors	Customer:	Denver Fire Department
Checked:	3-25-22	DFD Lineshop	Installation:		Diagram No.:	
Date:	3/14/13 2:25 PM/6/10/22 8:10 AM		File:	Sta 1 drs 3-22-22.lsc	Page:	6 / 22



#### Station 1 Diesel fan counter B018 exfancnt M4 nt/Cnt M + Rem = onOn=0+ Off=0 Start=0 Diesel ex fan hours B020 exfanhrs M6 MI= 0h 0m+ OT= 0h 0m Q->0=R+En page 9 Creator: Project: Sta 1 doors Customer: Denver Fire Department Checked: DFD Lineshop Installation: Diagram No.: 3/14/13 2:25 PM/6/10/22 8:10 AM Date: File: Sta 1 drs 3-22-22.lsc Page: 8/22

# **Sta 1 -Section of other sources of influence on Apparatus bay lights**

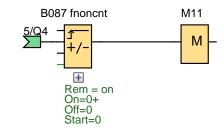




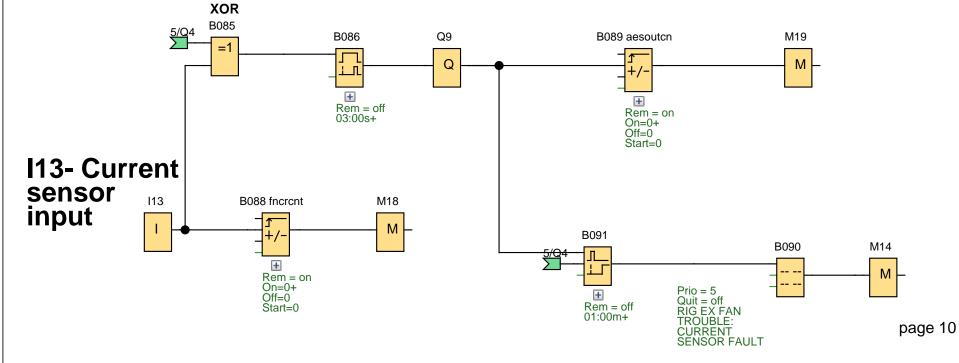
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(	Creator:	JBL		Project:	Sta 1 doors	Customer:	Denver Fire Department
	Checked:	3-25-22	DFD Lineshop	Installation:		Diagram No.:	
	Date:	3/14/13 2:25 PM/6/10/22 8:10 AM	1	File:	Sta 1 drs 3-22-22.lsc	Page:	9 / 22
_					-		

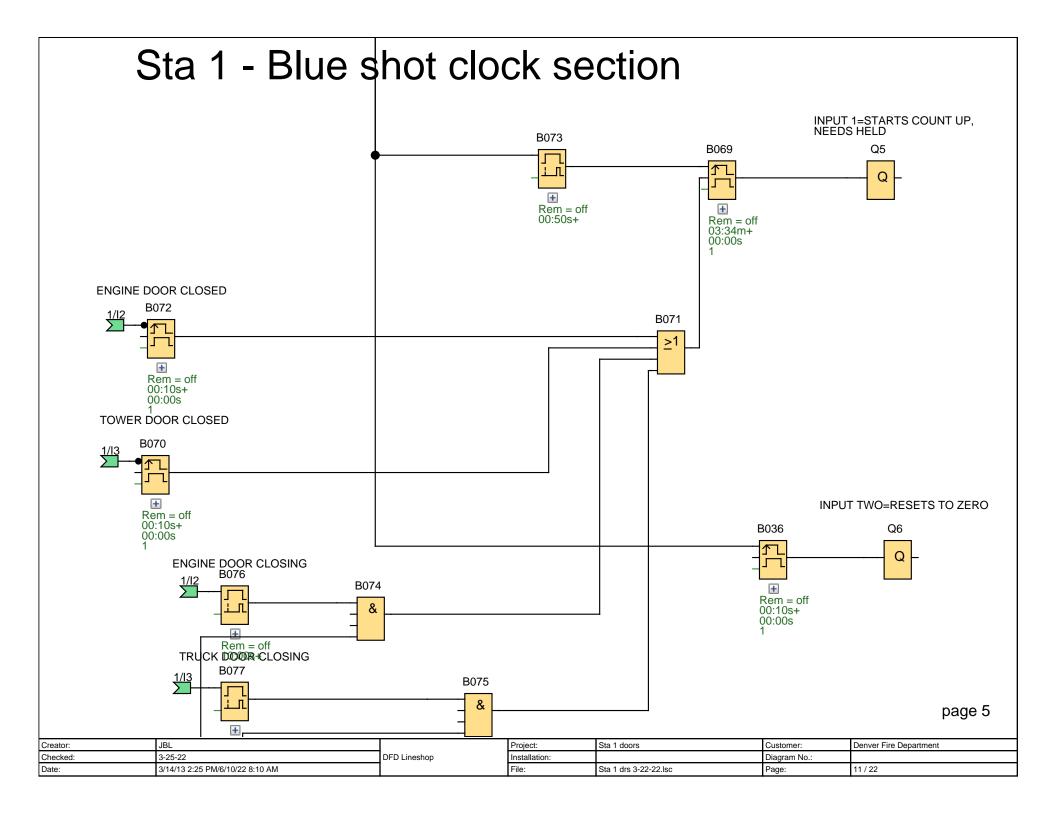
# Sta 1 AES/RIG FAN SECTION, this tells if "calling for" rig fan and rig fan current is being produced at the same time

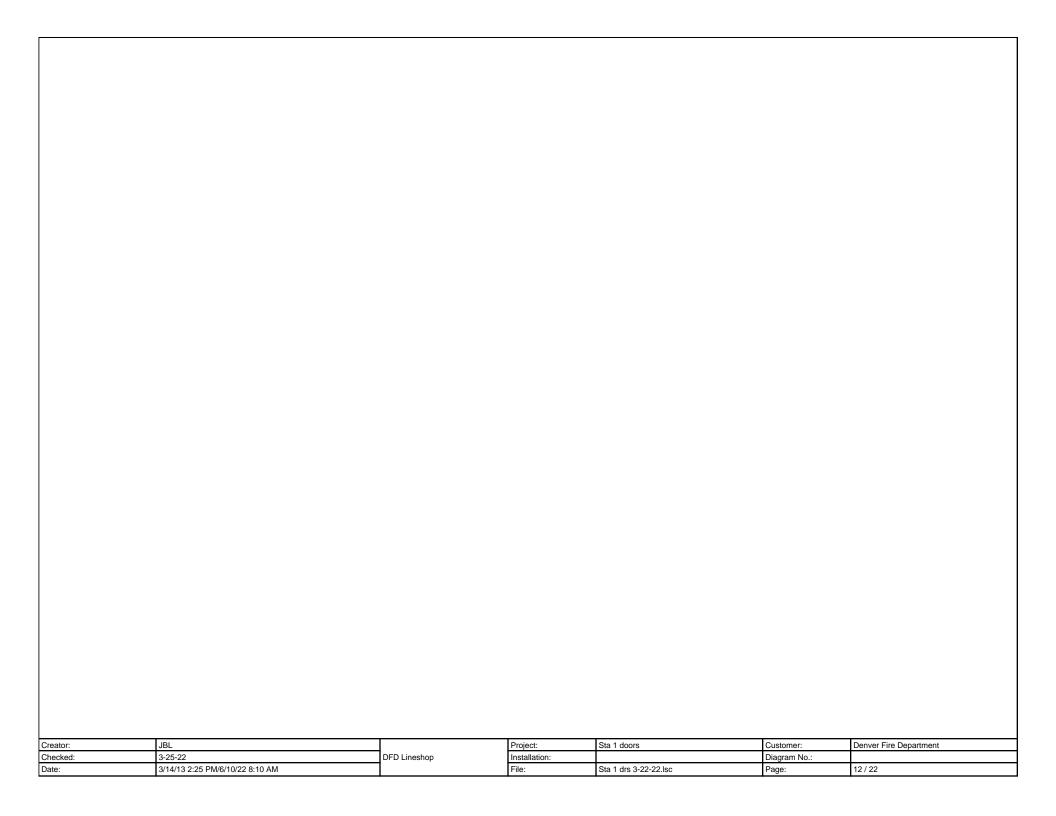


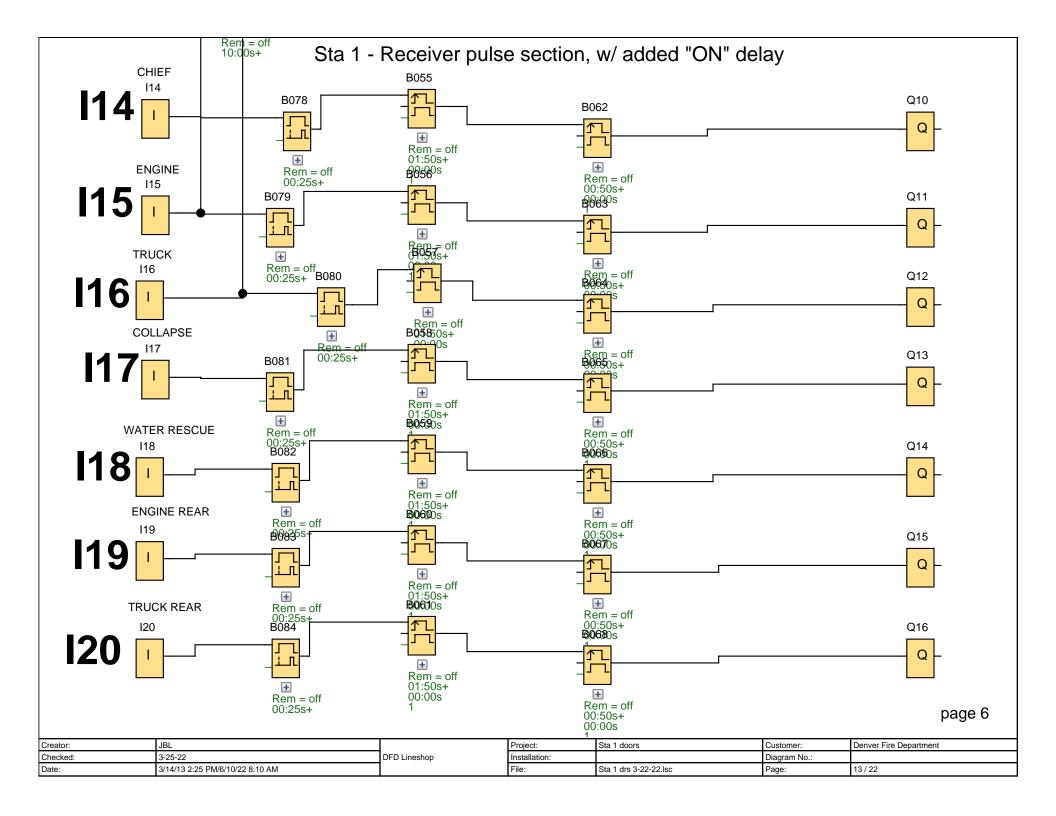
# **Q9-Output** to **AES**

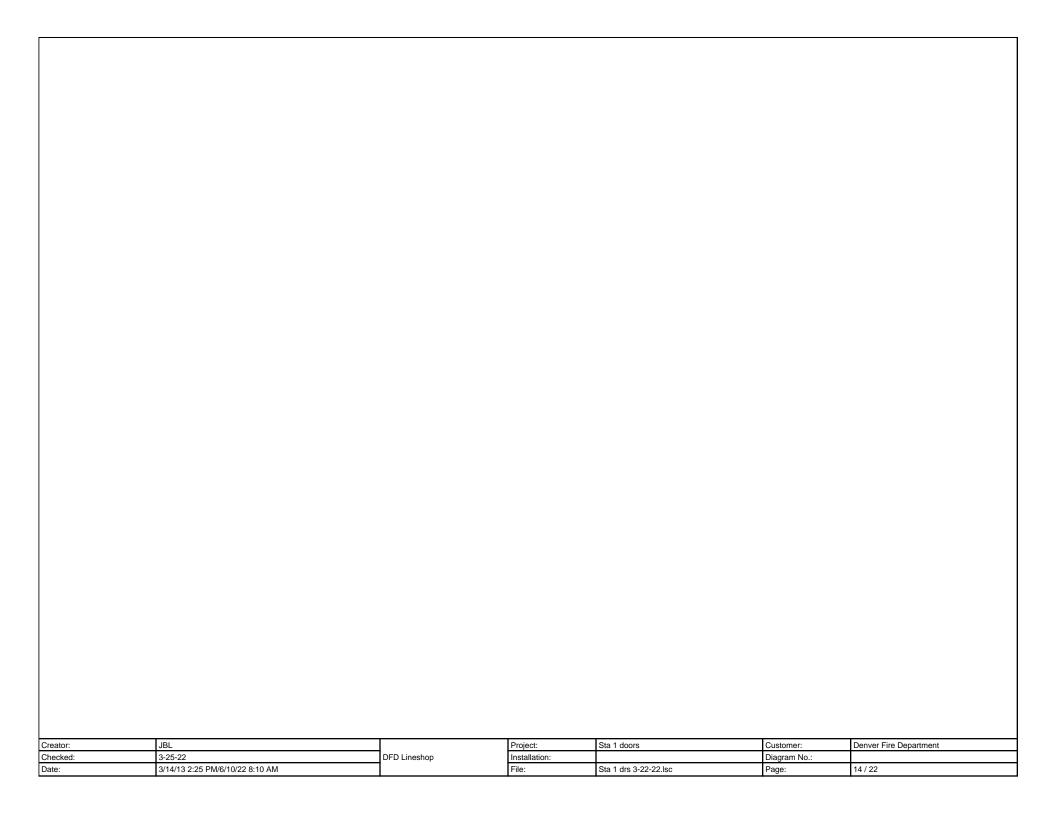


Creator:	JBL		Project:	Sta 1 doors	Customer:	Denver Fire Department
Checked:	3-25-22	DFD Lineshop	Installation:		Diagram No.:	
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B001 (On-delay):  B002 (wdrcont(Up/Down counter): Front west door  B002 (wdrcont(Up/Down counter): Front west door  B003 (On-delay):  B005 (On-delay):  B007 (Zesttmr(Edge-triggered interval time-delay relay):  B009 efan tmr(Edge-triggered interval time-delay relay):  B009 efan tmr(Edge-triggered interval time-delay relay):  B010 cfantmr(Edge-triggered interval time-delay relay):  B011 ebay lts(Edge-triggered interval time-delay relay):  B012 cnbaylts(Edge-triggered interval time-delay relay):  B013 wbay lts(Edge-triggered interval time-delay relay):  B014 fourner(Up/Down counter):  B015 for control (Up/Down counter):  B016 for control (Up/Down counter):  B017 ftrkcntr(Up/Down counter):  B018 exfancnt(Up/Down counter):  B019 backeast(Up/Down counter):  B020 exfanhrs(Operating hours counter):  B021 (Eagster(Up/Down counter):  B022 ftrateast(Up/Down counter):  B023 frateast(Up/Down counter):  B024 ftrateast(Up/Down counter):  B025 frateast(Up/Down counter):  B026 gestification (B026 ftrateast(Up/Down counter):  B027 (Eagster(Up/Down counter):  B028 ftrateast(Up/Down counter):  B029 ftrateast(Up/Down counter):  B020 exfanhrs(Up/Down counter):  B021 ftrateast(Up/Down counter):  B022 ftrateast(Up/Down counter):  B023 ftrateast(Up/Down counter):  B024 ftrateast(Up/Down counter):  B025 ftrateast(Up/Down counter):  B026 ftrateast(Up/Down counter):  B027 ftrateast(Up/Down counter):  B028 ftrateast(Up/Down counter):  B029 ftrateast(Up/Down counter):  B030 ftrateast(Up/Down counter):  B031 ftrateast(Up/Down counter):  B032 ftrateast(Up/Down counter):  B033 ftra	
B005(On-delay):  Rem = off 00:10s+  B007 (2esttmr(Edge-triggered interval time-delay relay):  Rem = off 00:00s  B009 efan tmr(Edge-triggered interval time-delay relay):  Rem = off 00:00s  B010 cfantmr(Edge-triggered interval time-delay relay):  Rem = off 00:00s  B011 ebay lts(Edge-triggered interval time-delay relay):  Rem = off 00:00s  B012 cnbay(ts(Edge-triggered interval time-delay relay):  Rem = off 00:00s  B013 wbay lts(Edge-triggered interval time-delay relay):  Rem = off 00:00s  B014 (pumpcnt(Up/Down counter):  Rem = on 00s  B015 (pumpcnt(Up/Down counter):  B016 (pumpcnt(Up/Down counter):  B017 (trkcntr(Up/Down counter):  B018 extanent(Up/Down counter):  B019 backeast(Up/Down counter):  B010 extanent on 00s  B011 extanent (Up/Down counter):  B011 extanent (Up/Down counter):  B012 extanent (Up/Down counter):  B013 extanent (Up/Down counter):  B014 extanent (Up/Down counter):  B015 extanent (Up/Down counter):  B016 extanent (Up/Down counter):  B017 extanent (Up/Down counter):  B018 extanent (Up/Down counter):  B019 backeast(Up/Down counter):  B010 extanent (Up/Down counter):  B011 extanent (Up/Down counter):  B012 (pumpcnt (Up/Down counter):  B013 extanent (Up/Down counter):  B014 extanent (Up/Down counter):  B015 extanent (Up/Down counter):  B016 extanent (Up/Down counter):  B017 (pumpcnt (Up/Down counter):  B018 extanent (Up/Down counter):  B019 extanent (Up/Down counter):  B019 extanent (Up/Down counter):  B020 extanent (Up/Down counter):  B020 extanent (Up/Down counter):  B021 (pumpcnt (Up/Down counter):  B022 (pumpcnt (Up/Down counter):  B023 (pumpcnt (Up/Down counter):  B024 (pumpcnt (Up/Down counter):  B025 (pumpcnt (Up/Down counter):  B026 (pumpcnt (Up/Down counter):  B027 (pumpcnt (Up/Down counter):  B028 (pumpcnt (Up/Down counter):  B029 (pumpcnt (Up/Down counter):  B020 (pumpcnt (Up/Down counter):  B020 (pumpcnt (Up/Down counter):  B	
B007 f2esttmr(Edge-triggered interval time-delay relay):  B009 efan tmr(Edge-triggered interval time-delay relay):  B010 cfantmr(Edge-triggered interval time-delay relay):  B011 ebay lts(Edge-triggered interval time-delay relay):  B012 cnbaylts(Edge-triggered interval time-delay relay):  B013 wbay lts(Edge-triggered interval time-delay relay):  B014 fpumpcnt(Up/Down counter):  B015 ffrechtr(Up/Down counter):  B017 ffrechtr(Up/Down counter):  B018 exfancnt(Up/Down counter):  B019 backeast(Up/Down counter):  B020 exfanhrs(Operating hours counter):	
B009 efan tmr(Edge-triggered interval time-delay relay):    Rem = off	
B010 cfantmr(Edge-triggered interval time-delay relay):  B011 ebay lts(Edge-triggered interval time-delay relay):  B012 cnbaylts(Edge-triggered interval time-delay relay):  B013 wbay lts(Edge-triggered interval time-delay relay):  B014 fpumpcnt(Up/Down counter):  B015 frikcntr(Up/Down counter):  B016 exfancnt(Up/Down counter):  B017 ftrkcntr(Up/Down counter):  B018 exfancnt(Up/Down counter):  B019 backeast(Up/Down counter):  B020 exfanhrs(Operating hours counter):  B021 exfanch hours  B022 exfanhrs(Operating hours counter):  B023 exfanch from east door  B035 exfanch from east door	
B011 ebay lts(Edge-triggered interval time-delay relay):  Rem = of	
B012 cnbaylts(Edge-triggered interval time-delay relay):  Rem = off 02:00m+ 01:00m+ 01	
B013 wbay lts(Edge-triggered interval time-delay relay):  Rem = off 02:00m+ 00:00s  B014 fpumpcnt(Up/Down counter):  Front 2nd from west door  B017 ftrkcntr(Up/Down counter):  B018 exfancnt(Up/Down counter):  B018 exfancnt(Up/Down counter):  B019 backeast(Up/Down counter):  B19 backeast(Up/Down counter):  B10 backeast(Up/Down counter):  B	
B014 fpumpcnt(Up/Down counter):  Rem = on	
B017 ftrkcntr(Up/Down counter):  Rem = on On=0+ Ostart=0  B018 exfancnt(Up/Down counter):  Bem = on On=0+ Ostart=0  Rem = on On=0+ Ostart=0  B019 backeast(Up/Down counter):  B019 backeast(Up/Down counter):  B019 backeast(Up/Down counter):  B020 exfanhrs(Operating hours counter):  B020 exfanhrs(Operating hours counter):  B027 f2eastdr(Up/Down counter):  B027 f2eastdr(Up/Down counter):  Rem = on On=0+ Ostart=0  MI= 0h on On=0+ Ostart=0  Rem = on Osta	
B018 exfancnt(Up/Down counter):  Diesel fan counter  Rem = on On=0+ On = 0+ On	
B019 backeast(Up/Down counter):  Back center door  Rem = on On=0+ Off=0 Start=0  B020 exfanhrs(Operating hours counter):  Ml= 0h 0n OT=	
B020 exfanhrs(Operating hours counter):  B020 exfanhrs(Operating hours counter):  MI= 0h 0n OF=	
B027 f2eastdr(Up/Down counter) : Rem = on On=0+ Off=0 Start=0	
	n+ )m n
B029 frnteast(Up/Down counter): Front east door  Rem = on On=0+ Off=0 Start=0	
B030 backwest(Up/Down counter) :  Back west door  Rem = on On=0+ Off=0 Start=0	
r: JBL Project: Sta 1 doors	

Creator:	JBL		Project:	Sta 1 doors	Customer:	Denver Fire Department
Checked:	3-25-22		Installation:		Diagram No.:	
Date:	3/14/13 2:25 PM/6/10/22 8:10 AM		File:	Sta 1 drs 3-22-22.lsc	Page:	15 / 22

Block Num	ber (Type)				Parameter					
B031 vakey	enb(Edge-triggered interval time-dela	ay relay) :			Rem = off 03:00m+ 00:00s					
B036(Edge-	triggered interval time-delay relay) :				Rem = off 00:10s+ 00:00s					
B037 f2wstti	mr(Edge-triggered interval time-delay	/ relay) :			Rem = off 02:00m+ 00:00s					
B038(Edge-	triggered interval time-delay relay) :		Rem = off 00:00m+ 00:00s							
B044(Async	hronous pulse generator) :		Rem = off 01:00s+ 00:50s							
B045(Asynchronous pulse generator) :					Rem = off 10:00s+ 00:50s					
B046(Edge-triggered interval time-delay relay) :					Rem = off 02:00m+ 00:00s					
B047(Edge-triggered interval time-delay relay) :					Rem = off 02:00m+ 00:00s					
B048(Edge-	B048(Edge-triggered interval time-delay relay) :					Rem = off 02:00m+ 00:00s				
B050(On-de	elay) :				Rem = off 01:00s+					
B051(On-de	elay) :				Rem = off 00:10s+					
B052(On-de	elay) :				Rem = off 01:00s+					
B053(On-de	elay) :				Rem = off 01:00s+					
B054(On-de	elay) :				Rem = off 00:00s+					
B055(Edge-	triggered interval time-delay relay) :				Rem = off 01:50s+ 00:00s					
B056(Edge-	triggered interval time-delay relay) :				Rem = off 01:50s+ 00:00s					
B057(Edge-	triggered interval time-delay relay) :				Rem = off 01:50s+ 00:00s					
B058(Edge-triggered interval time-delay relay) :					Rem = off 01:50s+ 00:00s 1					
ator:	JBL		Project:	Sta 1 de	oors	Customer:	Denver Fire Department			
cked: e:	3-25-22 3/14/13 2:25 PM/6/10/22 8:10 AM	DFD Lineshop	Installation: File:	Sta 1 de	rs 3-22-22.lsc	Diagram No.: Page:	16 / 22			

Creator:	JBL	Į.	Project:	Sta 1 doors	Customer:	Denver Fire Department
Checked:	3-25-22	DFD Lineshop	Installation:		Diagram No.:	
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			-	-		

Block Numb	er (Type)				Parameter				
B059(Edge-t	riggered interval time-delay relay) :				Rem = off 01:50s+ 00:00s 1				
B060(Edge-t	riggered interval time-delay relay) :				Rem = off 01:50s+ 00:00s				
B061(Edge-t	riggered interval time-delay relay) :				Rem = off 01:50s+ 00:00s 1				
B062(Edge-t	Rem = off 00:50s+ 00:00s								
B063(Edge-t	B063(Edge-triggered interval time-delay relay) :								
B064(Edge-t	riggered interval time-delay relay) :				Rem = off 00:50s+ 00:00s				
B065(Edge-t	B065(Edge-triggered interval time-delay relay) :					Rem = off 00:50s+ 00:00s			
B066(Edge-t	riggered interval time-delay relay) :				Rem = off 00:50s+ 00:00s 1				
B067(Edge-t	riggered interval time-delay relay) :				Rem = off 00:50s+ 00:00s 1				
B068(Edge-t	riggered interval time-delay relay) :				Rem = off 00:50s+ 00:00s				
B069(Edge-t	riggered interval time-delay relay) :				Rem = off 03:34m+ 00:00s				
B070(Edge-t	riggered interval time-delay relay) :				Rem = off 00:10s+ 00:00s				
B072(Edge-t	riggered interval time-delay relay) :				Rem = off 00:10s+ 00:00s				
B073(On-del	ay) :				Rem = off 00:50s+				
B076(On-del	ay) :				Rem = off 10:00s+				
B077(On-del	ay) :				Rem = off 10:00s+				
B078(On-del	ay) :	Rem = off 00:25s+							
B079(On-del	B079(On-delay):					Rem = off 00:25s+			
					1 doors Customer: Denver Fire Department				
Checked:	3-25-22	DFD Lineshop	Installation:	C/- 1	les 2 22 22 1	Diagram No.:	47 / 22		
Date:	3/14/13 2:25 PM/6/10/22 8:10 AM		File:	ວເລ 1 0	lrs 3-22-22.lsc	Page:	17 / 22		

Block Numi	ber (Type)			Parameter					
B080(On-de	olay) :				Rem = off 00:25s+				
B081(On-de	elay) :				Rem = off 00:25s+				
B082(On-de	olay) :				Rem = off 00:25s+				
B083(On-de	elay) :				Rem = off 00:25s+				
B084(On-de	elay) :				Rem = off 00:25s+				
B086(On-de	elay) :				Rem = off 03:00s+				
B087 fnoncr	B087 fnoncnt(Up/Down counter) :								
B088 fncrcn	B088 fncrcnt(Up/Down counter) :								
B089 aesou	B089 aesoutcn(Up/Down counter) :								
B090(Messa	age texts):				Prio = 5 Quit = off Text1: enabled Text2: disabled				
TROUE	EXFAN  BLE:  NT  DR FAULT				Ticker setting - CBC - Line1: N - Line2: N - Line3: N - Line4: N - Line5: N - Line6: N Message Destina - Both	ation			
B091(Reten	tive on-delay) :				Rem = off 01:00m+				
B092(Astron	nomical clock) :				Lot: W104°59'51"+ Lat: N39°44'25" TZ: -7 Sunrise offset: 20 Sunset offset: -20				
C1 (Cursor l Simulates fro door opening	C1 (Cursor key) : Simulates front west door opening								
C2 (Cursor I Simulates fro door opening	C2 (Cursor key) : Simulates front 2nd frm west door opening								
C3 (Cursor I Simulates fro door opening	key) : ont center g								
Creator: Checked:	JBL 3-25-22	DFD Lineshop	Project: Installation:	Sta 1 d	doors	Customer: Diagram No.:	Denver Fire Department		
Date:	3/14/13 2:25 PM/6/10/22 8:10 AM	1	File:	Sta 1 d	drs 3-22-22.lsc	Page:	18 / 22		

В	Block Number (Type)				Parameter		
<u>/</u>  r  N	((Input) : ront west door- put wires to a I.O. contact						
l <u>í</u> F W	2(Input) : ront 2nd from rest door-						
ļ <u>i</u> C	B(Input) : ront enter door-						
I <sup>2</sup> F e	(Input) : ront 2nd from ast door-						
l F e	5(Input) : ront ast door-						
I6 B W	G(Input) : lack lest door-						
17 B e	7(Input) : ack ast door-						
19 1 li	O(Input) : 20 volt power is present ne side of contactor						
l' 1 iş ri s	10(Input): 20 volt power s present for g ex. fan load ide of contactor						
ļ́ s ir	13(Input) : 13- Current ensor iput						
ľ	(4(Input) : HIEF						
ľ	15(Input) : NGINE						
ľ	I6(Input) : RUCK						
ľ	I7(Input) : OLLAPSE						
ľ	I8(Input) : VATER RESCUE						
ľ	I9(Input) : NGINE REAR						
<u> 2</u> T	20(Input) : RUCK REAR						
b G	01(Output) : 11-App ay lights						
C G e	04(Output) : 14-Rig xhaust fan						
CR:Spili	27(Output) : kig ex fan i NORMAL owered ght						
Creator: Checked		DFD Lineshop	Project: Installation:	Sta 1 do	oors	Customer: Diagram No.:	Denver Fire Department
ate:	3/14/13 2:25 PM/6/10/22 8:10 AM	<u>'</u>	File:	Sta 1 dı	s 3-22-22.lsc	Page:	19 / 22

Block Numi	per (Type)			Parameter		
Q8(Output) : Rig Exhaust trouble light	fan					
Q9(Output) : Q9-Output to AES						
				-		
Creator:	JBL	Г	Project: S	ta 1 doors	Customer:	Denver Fire Department
Checked: Date:	3-25-22 3/14/13 2:25 PM/6/10/22 8:10 AM	DFD Lineshop	Installation:	ta 1 drs 3-22-22.lsc	Diagram No.: Page:	20 / 22

Connection		Label							
C1									
C2									
C3									
I1									
12									
13									
14									
15									
16									
17									
18									
19									
l10									
l11									
l12									
l13									
l14									
l15									
I16									
l17									
l18									
l19									
I20									
M1									
M2									
M3									
M4									
Creator:	JBL			Project:	Sta 1 doors	Customer:	Denver Fire Department		
Checked:	3-25-2	2	DFD Lineshop	Installation:		Diagram No.:			
Date:	3/14/1	3 2:25 PM/6/10/22 8:10 AM		File:	Sta 1 drs 3-22-22.lsc	Page:	21 / 22		

Connection	Label					
M5						
M6						
M8	Initialization Flag					
M9						
M10						
M11						
M14						
M18						
M19						
Q1						
Q4						
Q5						
Q6						
Q7						
Q8						
Q9						
Q10						
Q11						
Q12						
Q13						
Q14						
Q15						
Q16						
Creator: Checked:	JBL 3-25-22	DFD Lineshop	Project: Installation:	Sta 1 doors	Customer: Diagram No.:	Denver Fire Department
Date:	3/14/13 2:25 PM/6/10/22 8:10 AM		File:	Sta 1 drs 3-22-22.lsc	Page:	22 / 22