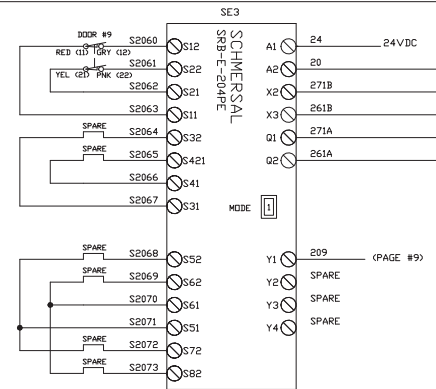
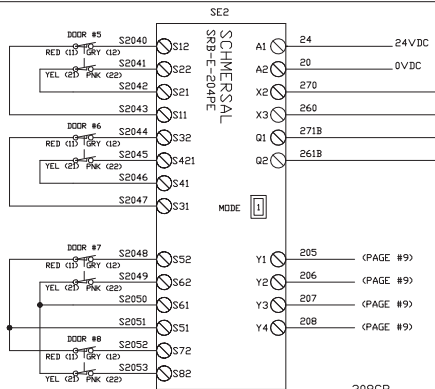
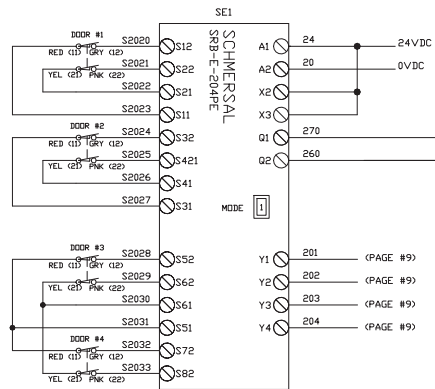
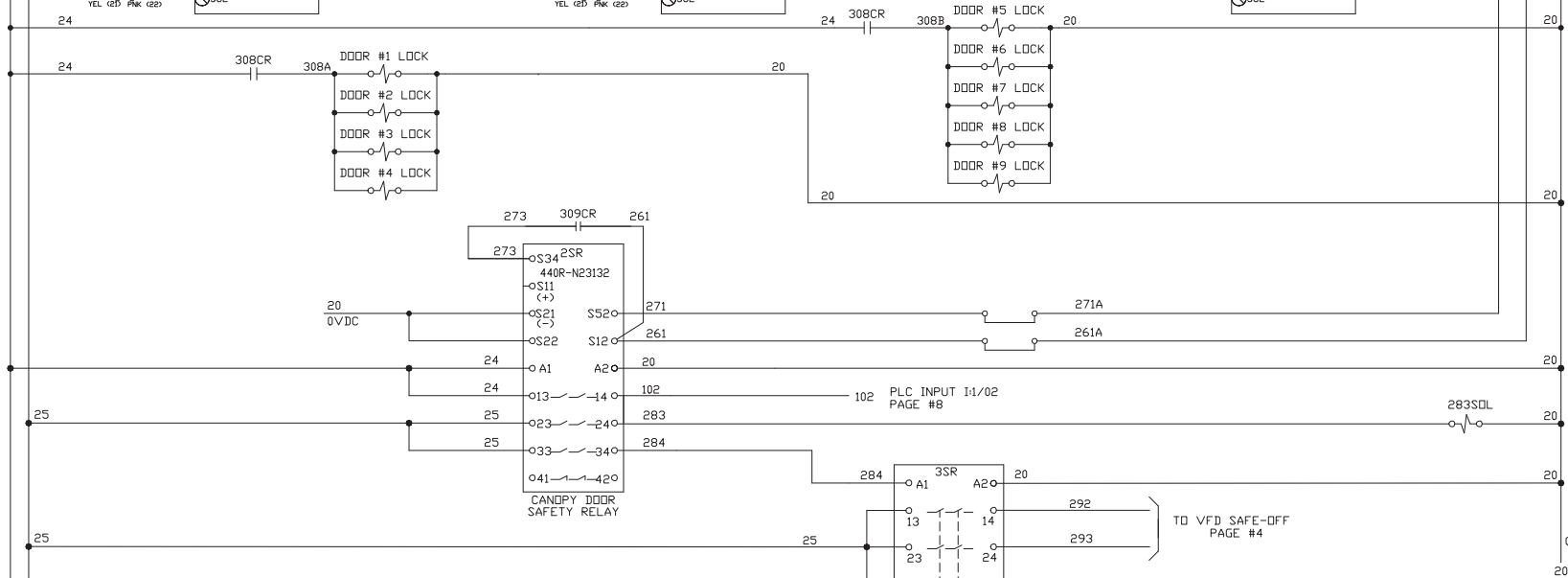


CANOPY SAFETY ZONE

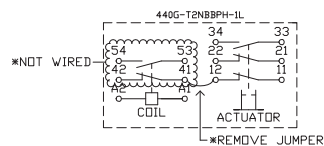
PAGE #1
24 VDC
24 25



PAGE #1
20
0VDC



* NOTE: SEE PAGE #3 FOR
440G-T2NBBPH-1L
LOCKABLE DOOR SWITCH
TERMINAL WIRING DETAILS CHART



NVENIA
A DURAVENT COMPANY

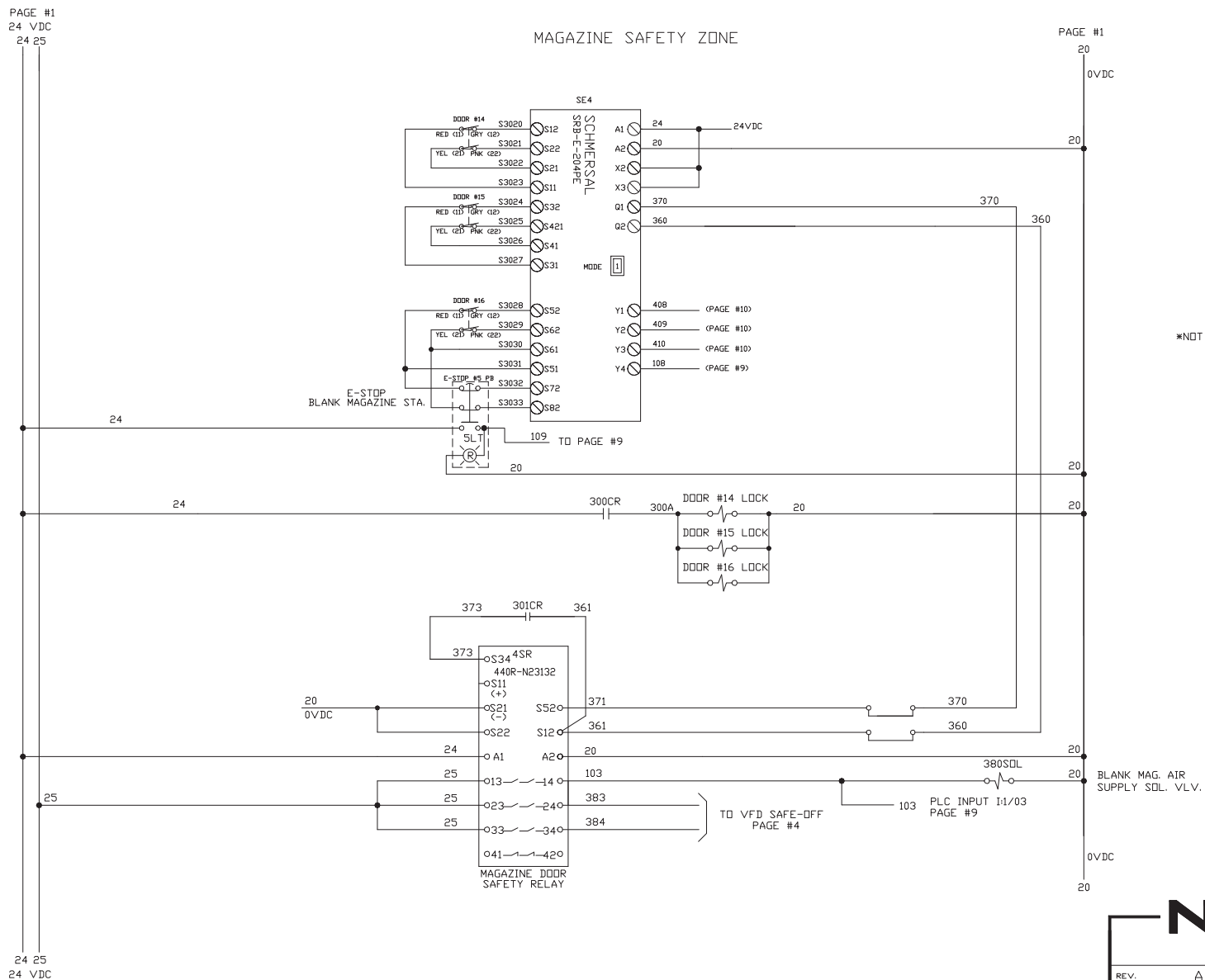
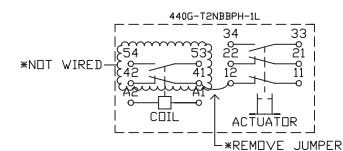
REV. A	ELECTRICAL	SIZE: B
DESIGNER: JIT	SCHEMATIC	DATE: 10/26/2021
MODEL: TS-2300		SHEET: 2 OF
BLUE MARBLE		DRAWING NUMBER: 210011-02

MAGAZINE SAFETY ZONE

440G-T2NBBPH-1L
LOCKABLE DOOR SWITCH
TERMINAL WIRING DETAILS

TERMINAL	COLOR	DESCRIPTION
A1	GRN	SOLENOID POWER
A2	BLUE	0VDC
11	RED	SAFETY A
12	RED/BLK	SAFETY A
21	RED/WHT	SAFETY B
22	RED/YEL	SAFETY B
33	BRN	+24 VDC
34	WHT	AUX. CONTACT (TO PLC)
41	N/A	*NOT CONNECTED
42	N/A	*NOT CONNECTED
53	N/A	*NOT CONNECTED
54	N/A	*NOT CONNECTED

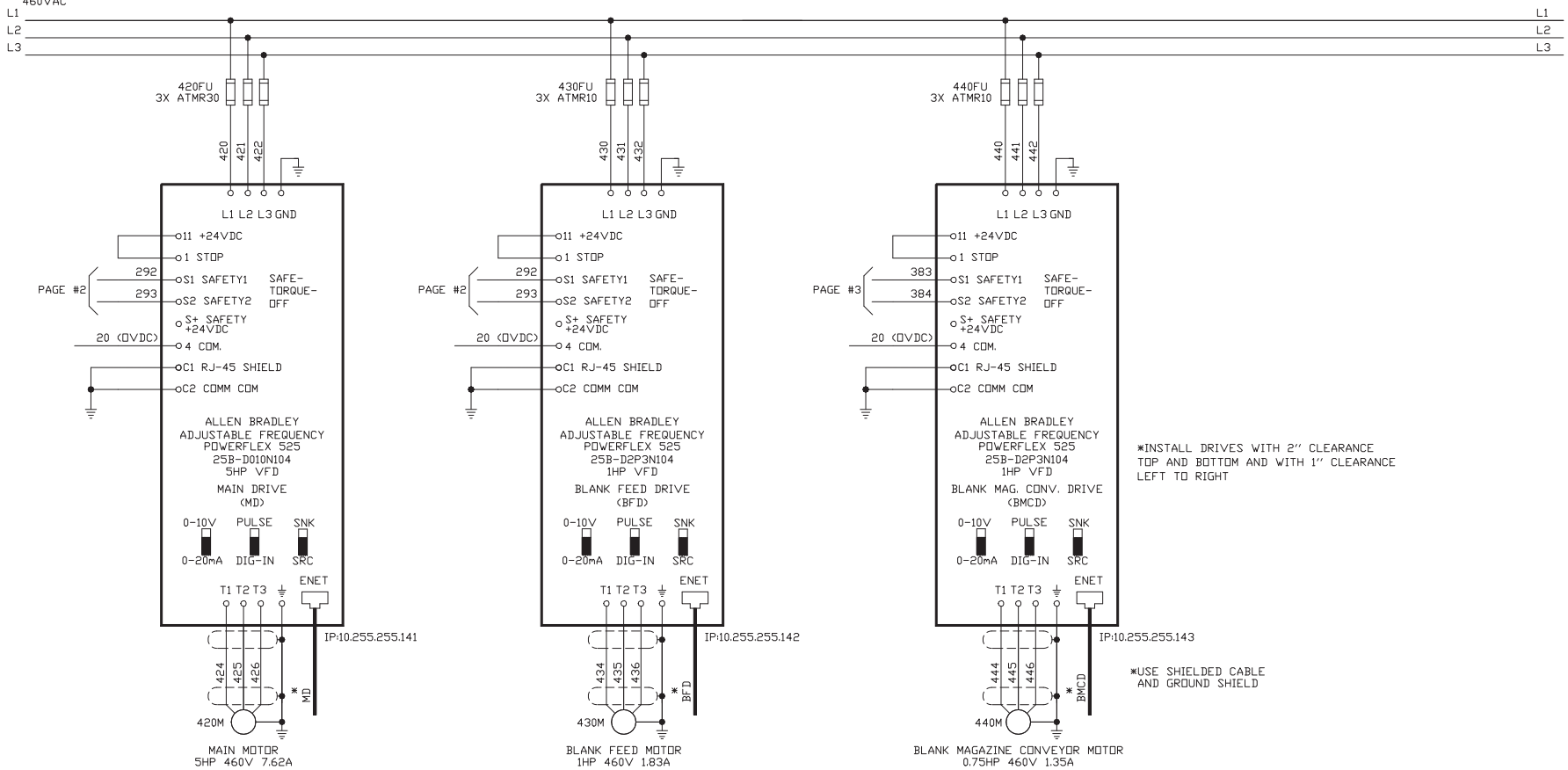
***REMOVE JUMPER BETWEEN 12 AND 41



NIVENIA
A DURAVENT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 3 OF
BLUE MARBLE		DRAWING NUMBER: 210011-03

FROM PAGE #1
460VAC



*INSTALL DRIVES WITH 2" CLEARANCE
TOP AND BOTTOM AND WITH 1" CLEARANCE
LEFT TO RIGHT

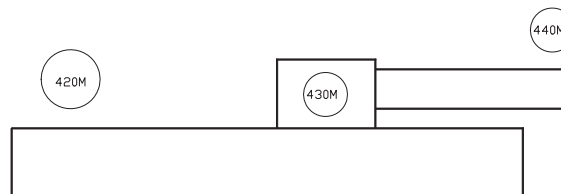
*USE SHIELDED CABLE
AND GROUND SHIELD

* SET TO THE MAXIMUM ALLOWABLE MOTOR CURRENT

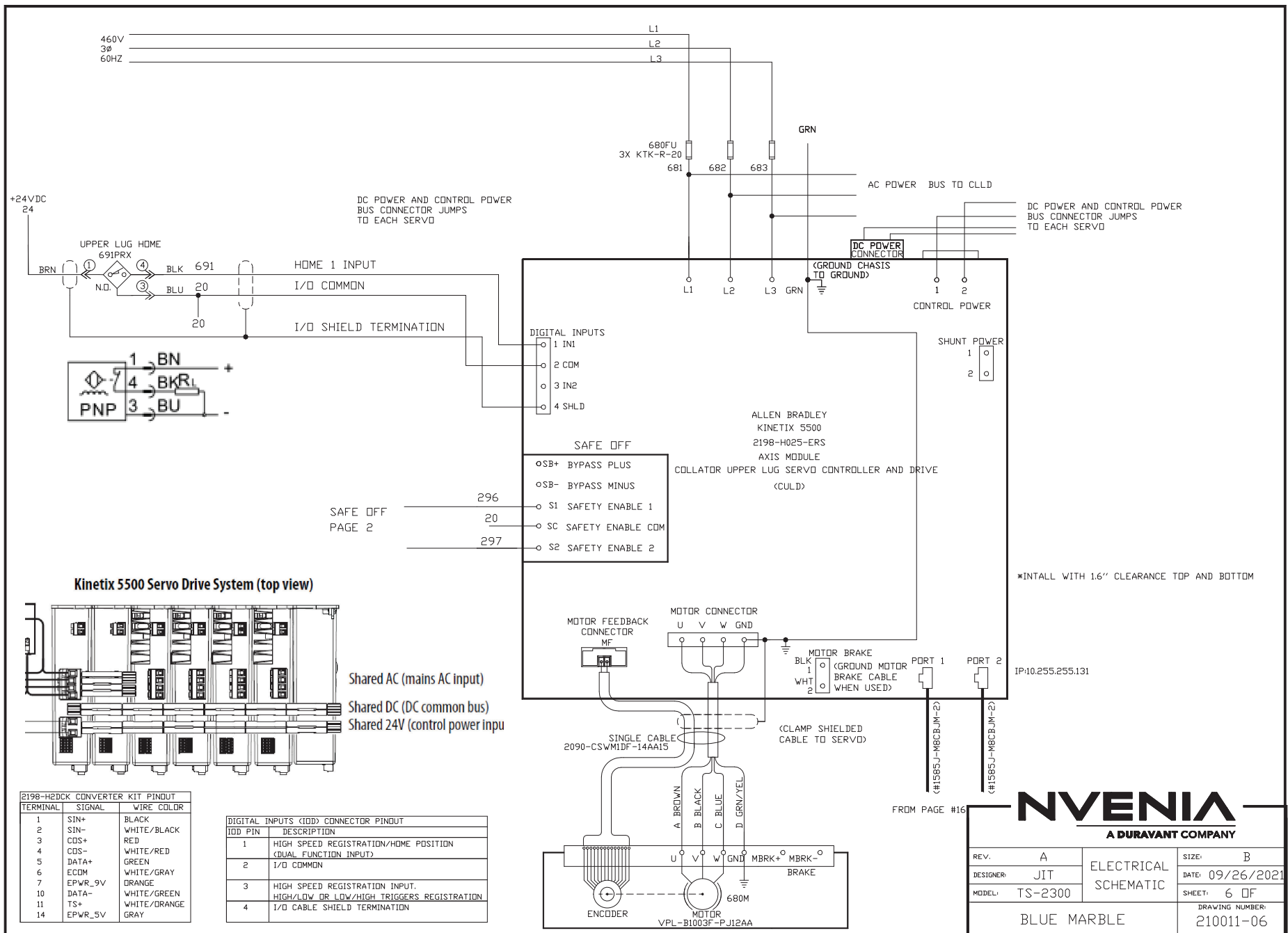
POWERFLEX 525 MAIN DRIVE SET UP (PRESET)
(DIFFERENT THAN DEFAULT)

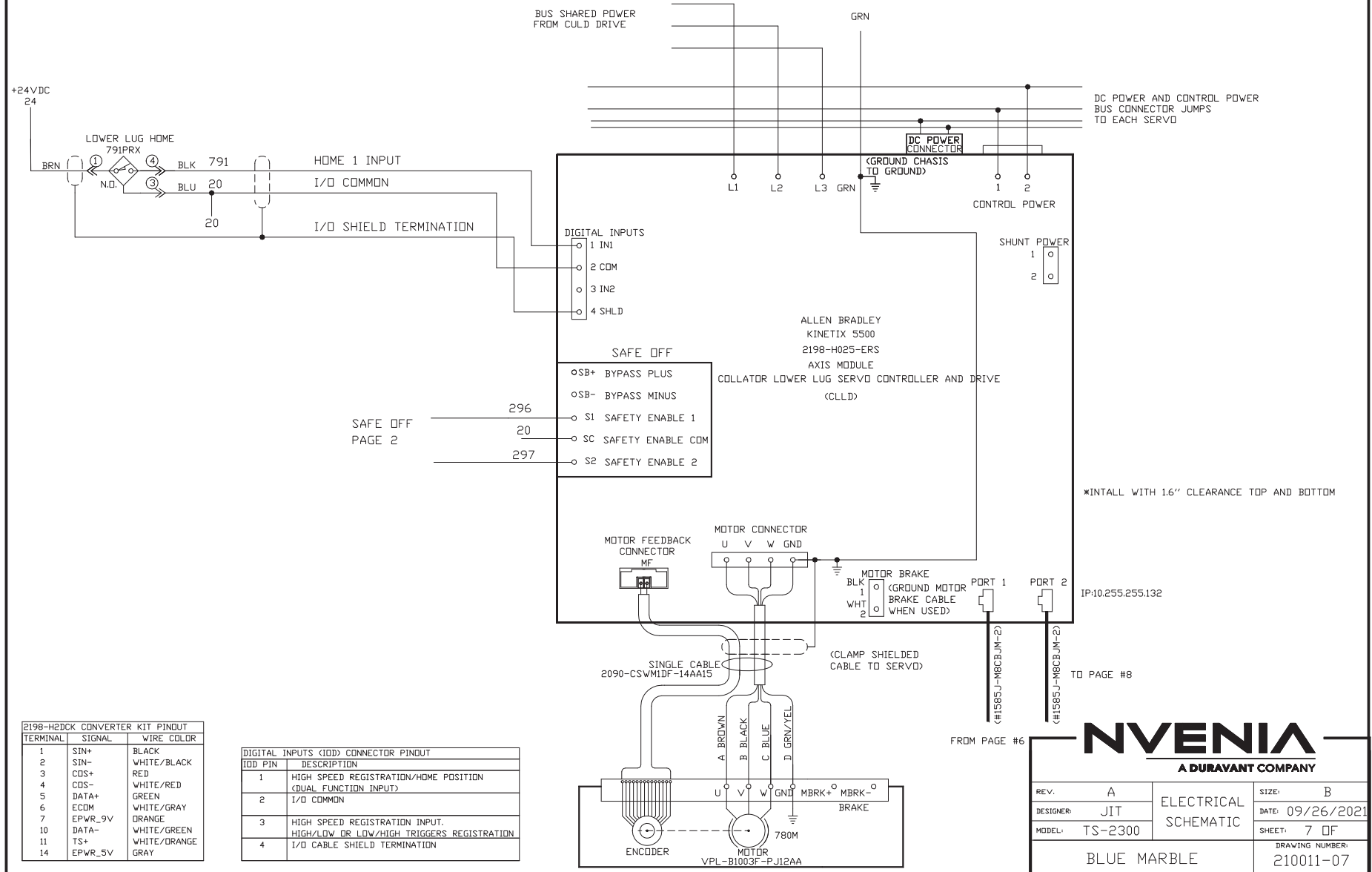
DISPLAY	PARAMETER DESCRIPTIONS	SETTING
P031	RATED VOLTAGE	460
P033	MOTOR OL CURRENT	*
P046	START SOURCE	5 ETH
P047	SPEED REFERENCE	15 ETH
P041	ACCELERATION TIME	1
P042	ACCELERATION TIME	0.5
P044	MAXIMUM FREQUENCY	60
A543	START AT POWER UP	1.0

USE VFD CABLE PROVIDED. THIS IS
RATED FOR TRAYS. ALSO, USE SHIELD
CONNECTORS AT MOTOR SIDE.



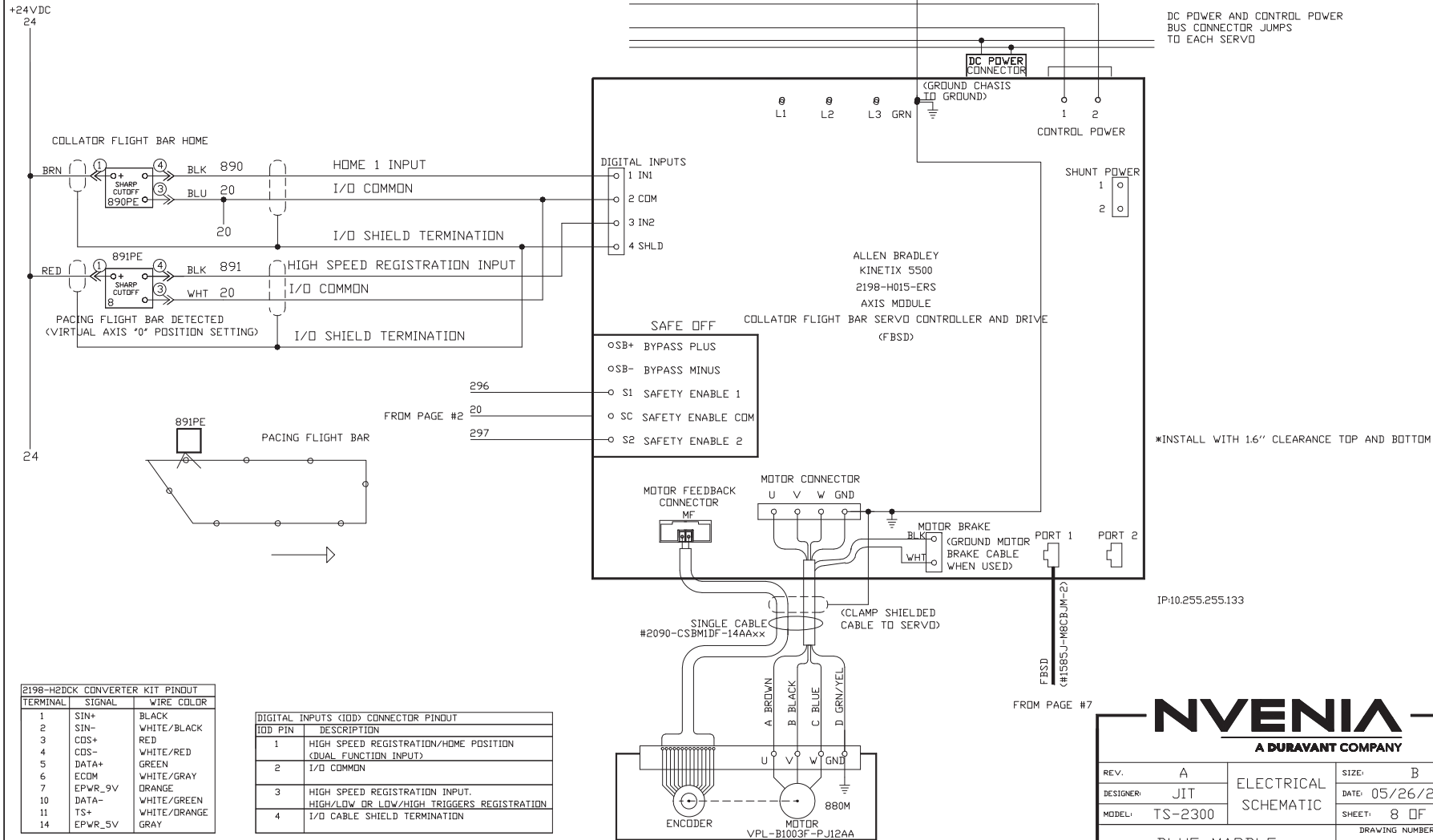
NVENIA			
A DURAVANT COMPANY			
REV. A	ELECTRICAL SCHEMATIC	SIZE: B	
DESIGNER: JIT		DATE: 05/26/2021	
MODEL: TS-2300		SHEET: 4 OF	
BLUE MARBLE		DRAWING NUMBER: 210011-04	





NVENIA
A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT	DATE: 09/26/2021	SHEET: 7 OF
MODEL: TS-2300	DRAWING NUMBER: 210011-07	
BLUE MARBLE		

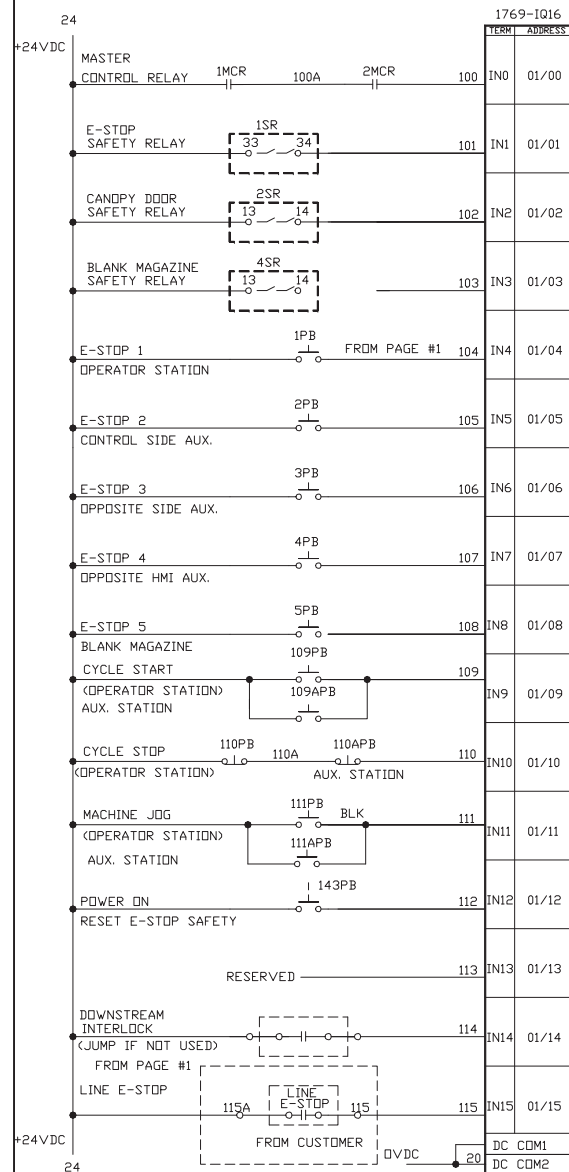


NVENIA

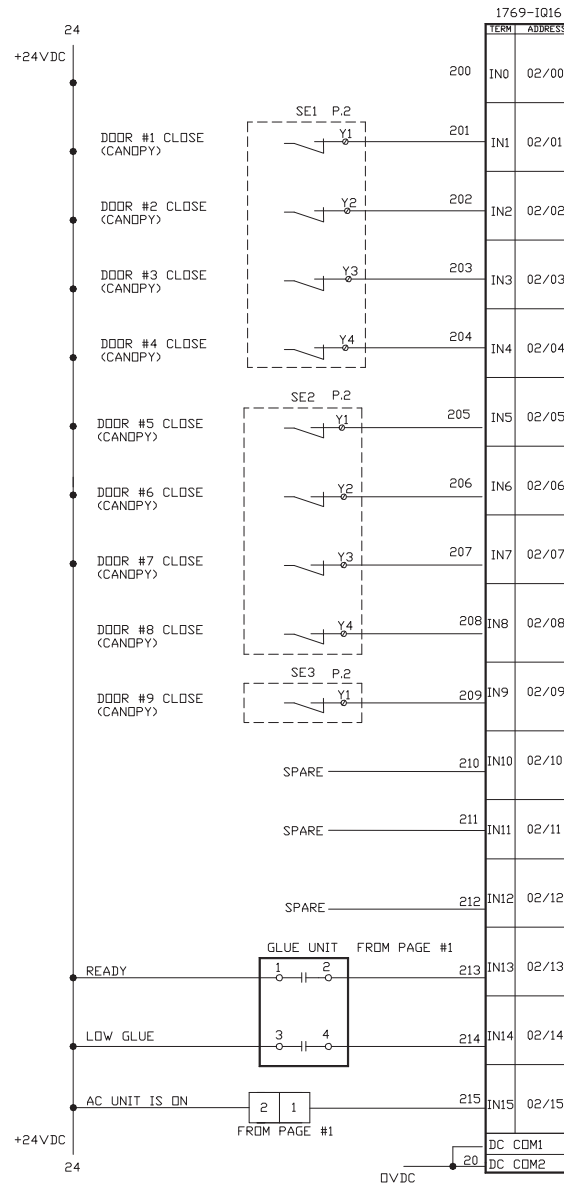
A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 8 OF
BLUE MARBLE		DRAWING NUMBER: 210011-08

INPUT MODULE #1



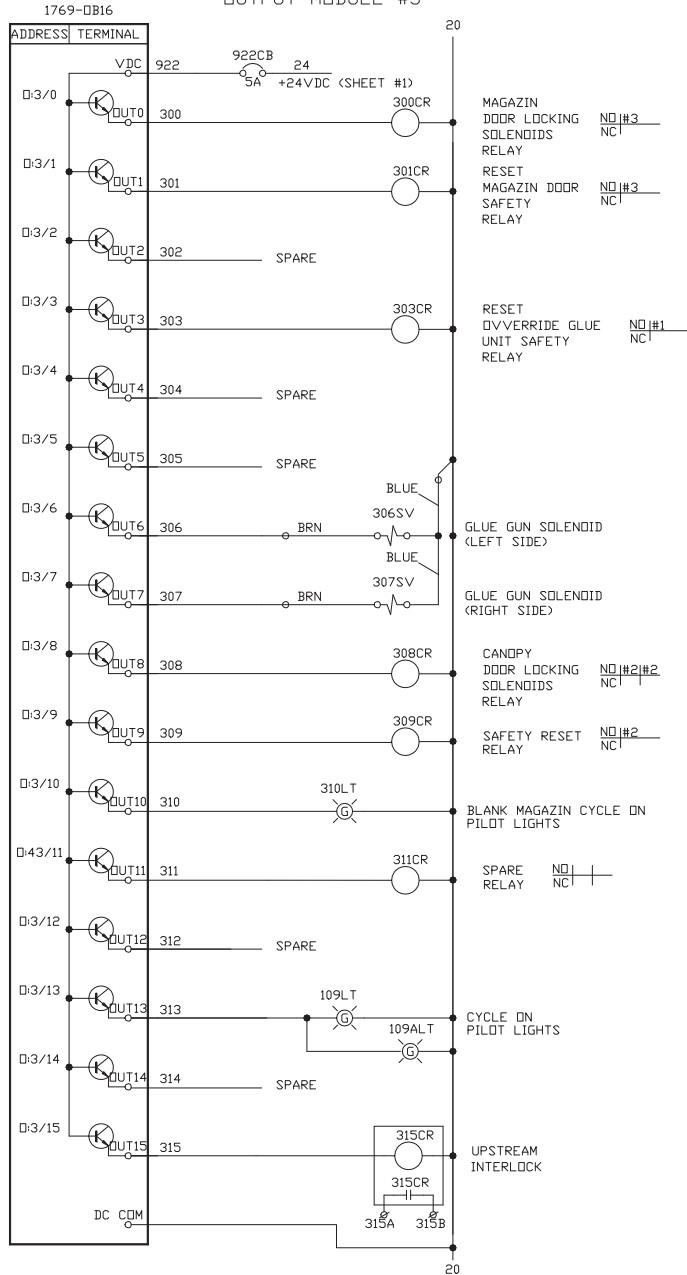
INPUT MODULE #2



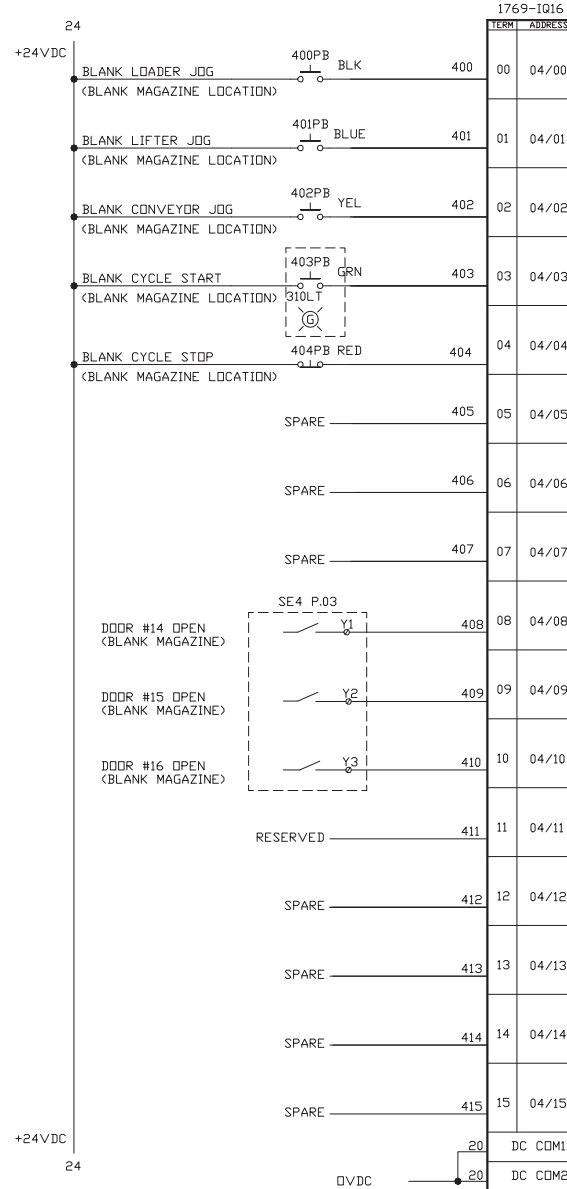
NVENIA
A DURAVANT COMPANY

REV. A	SIZE B
DESIGNER: JIT	DATE: 05/25/2021
MODEL: TS-2300	SHEET: 9 OF
BLUE MARBLE	DRAWING NUMBER: 210011-09

OUTPUT MODULE #3

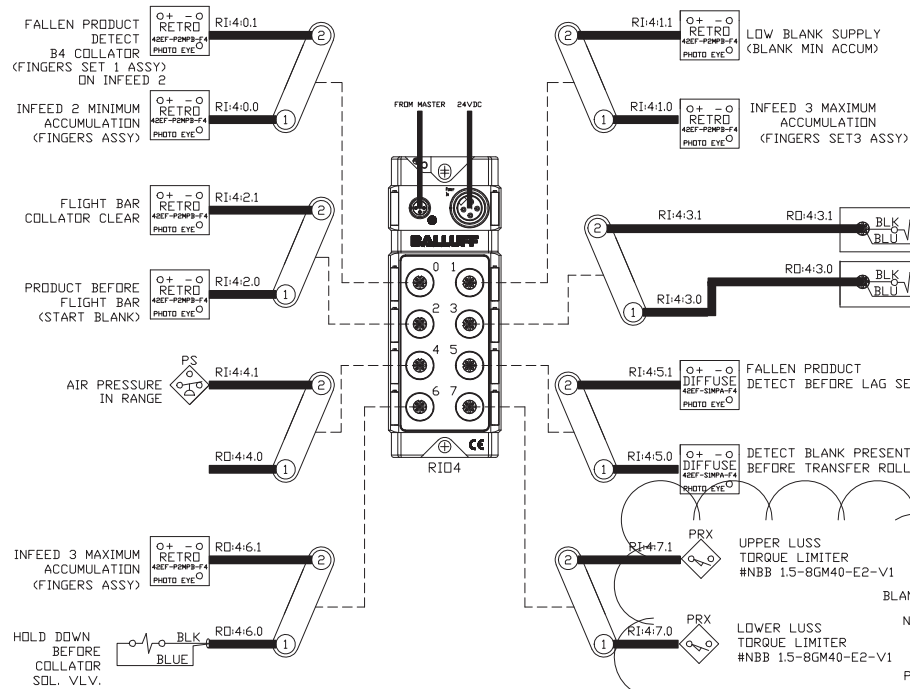


INPUT MODULE #4

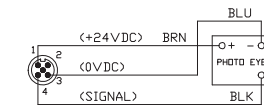


NVENIA
A DURAVANT COMPANY

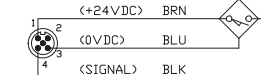
REV. A	ELECTRICAL SCHEMATIC	SIZE B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 10 OF
BLUE MARBLE		DRAWING NUMBER: 210011-10



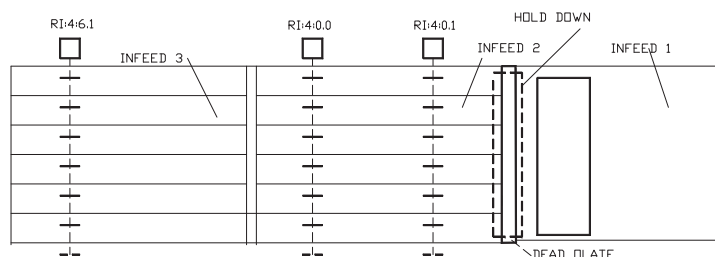
GENERAL WIRING OF 3 WIRE DEVICES



PROXIMITY SWITCH



*DO NOT USE 2 WIRE SENSORS



REMOTE INPUT/OUTPUT

RI:6:6.1

PIN NUMBER

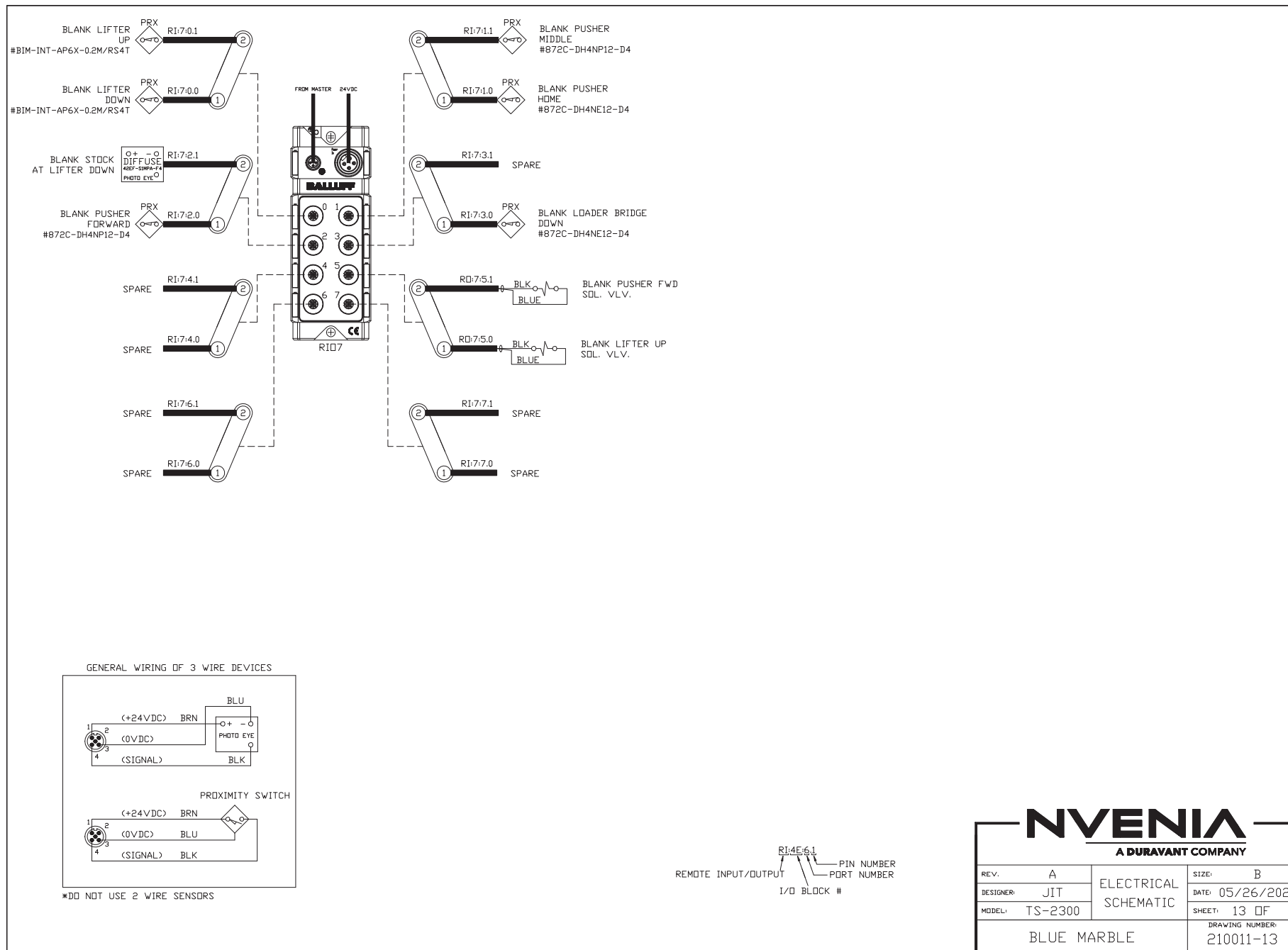
PORT NUMBER

I/O BLOCK #

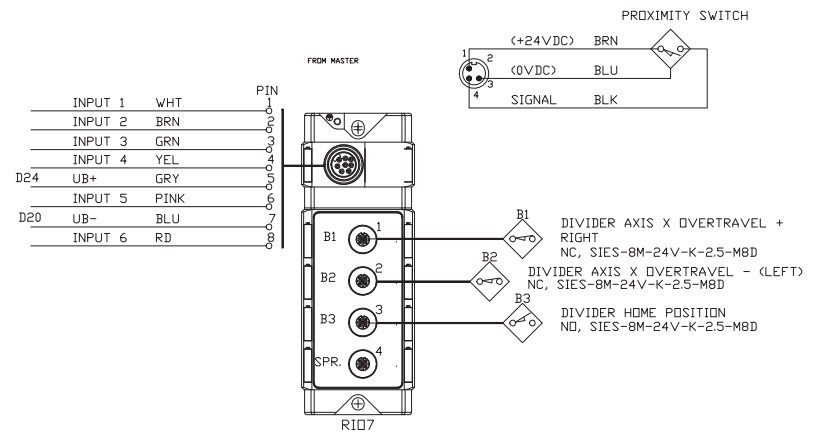
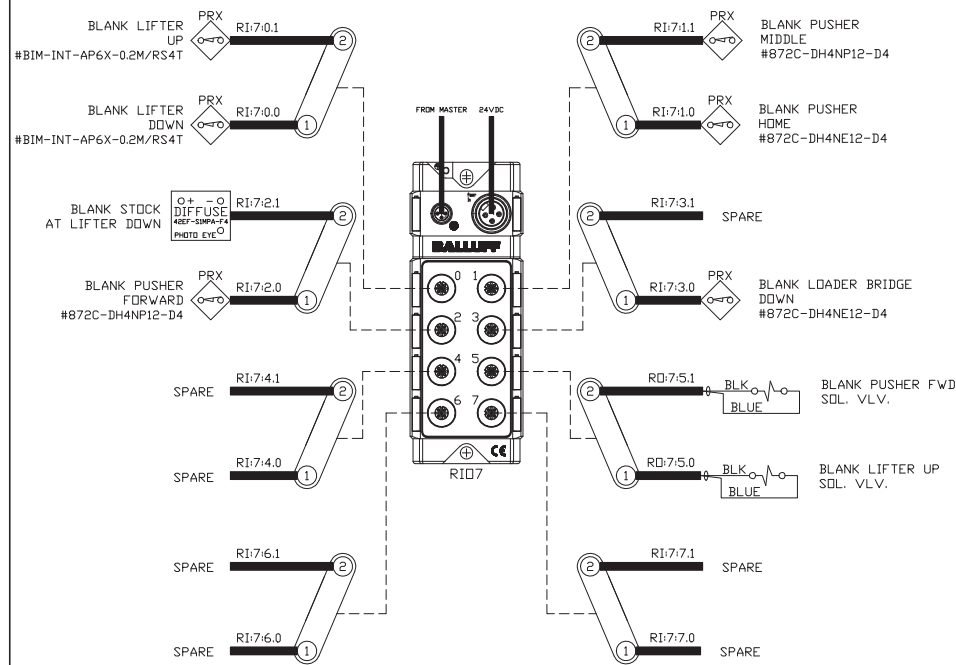
NVENIA

A DURAVANT COMPANY

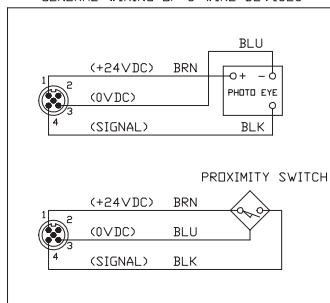
REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 12 OF
BLUE MARBLE		DRAWING NUMBER: 210011-12



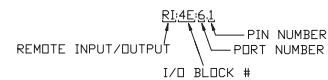
NVENIA A DURAVANT COMPANY		
REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 13 OF
BLUE MARBLE		DRAWING NUMBER: 210011-13



GENERAL WIRING OF 3 WIRE DEVICES



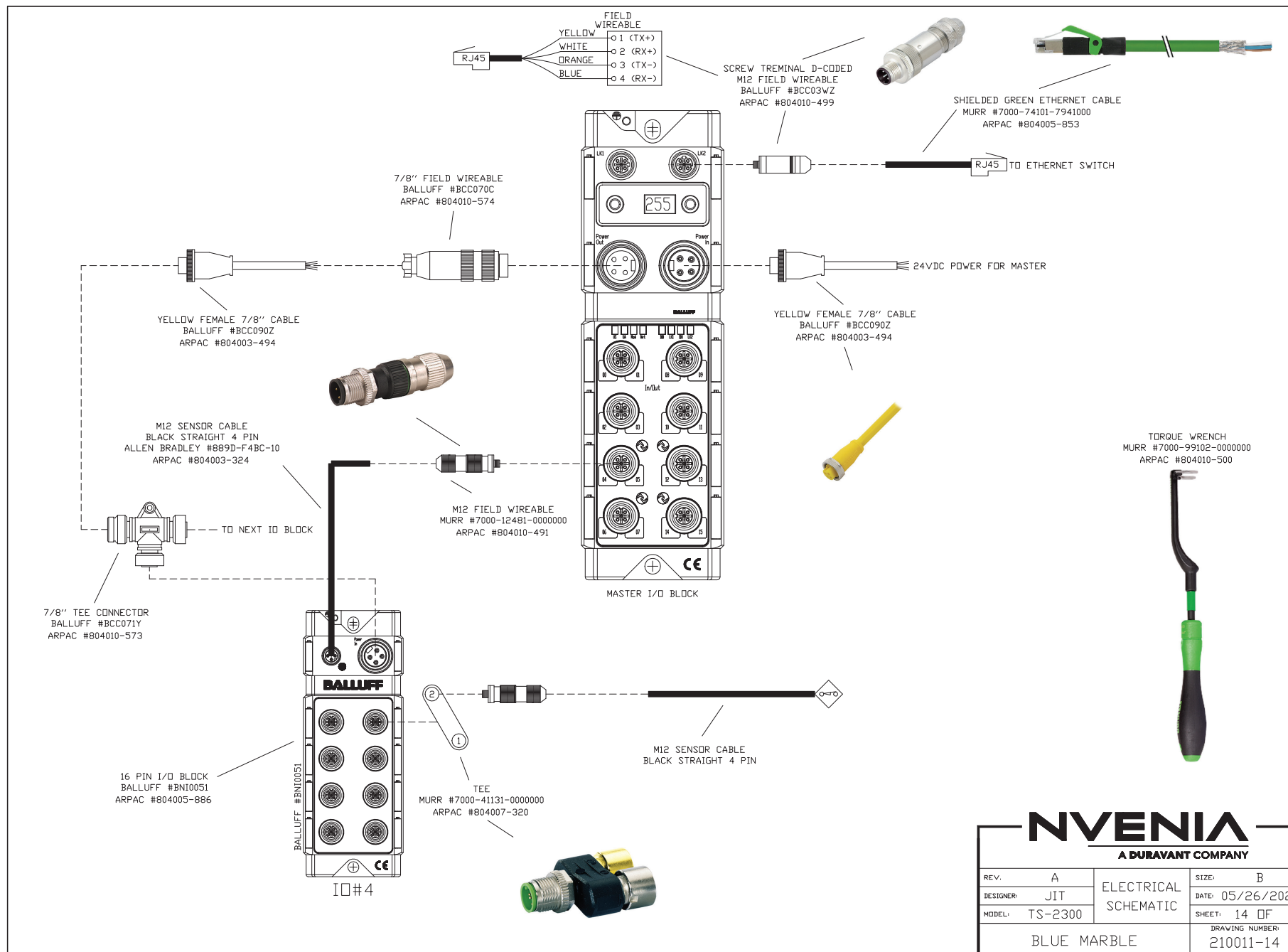
*DO NOT USE 2 WIRE SENSORS



NVENIA

A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 13 OF
BLUE MARBLE		DRAWING NUMBER: 210011-13



NVENIA			
A DURAVANT COMPANY			
REV. A	ELECTRICAL SCHEMATIC	SIZE: B	
DESIGNER: JIT		DATE: 05/26/2021	
MODEL: TS-2300		SHEET: 14 OF	
BLUE MARBLE		DRAWING NUMBER: 210011-14	

SAFETY BLOCK
M23 POWER INPUT, 8X 8 PIN INPUTS
ALLEN BRADLEY #898D-P88RT-M19
ARPAC #804005-855



M23 CABLE
YELLOW STRAIGHT 19 PIN
ALLEN BRADLEY #889M-R19RM-15
ARPAC #804005-856



TO POWER, INPUTS, SAFETY RELAY

8 PIN M12 FIELD WIREABLE
MURR #7000-17301-0000000
ARPAC #804010-501



SPARE PORT MUST HAVE JUMPER



SHORTING PLUG FOR SAFETY BLOCK
ALLEN BRADLEY #898D-B1RU-DM
ARPAC #804010-502

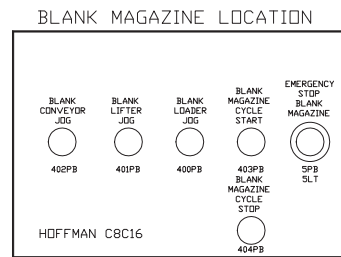
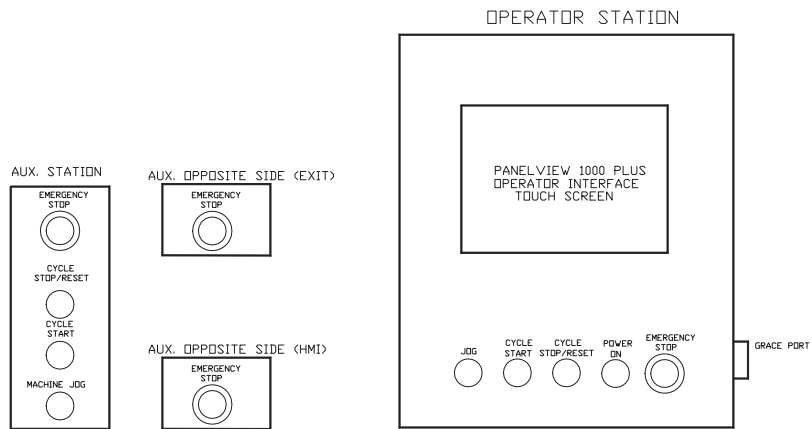


8 PIN M12 CABLE WITH FLYING LEADS
MURR #889D-F8AB-5
ARPAC #804003-204

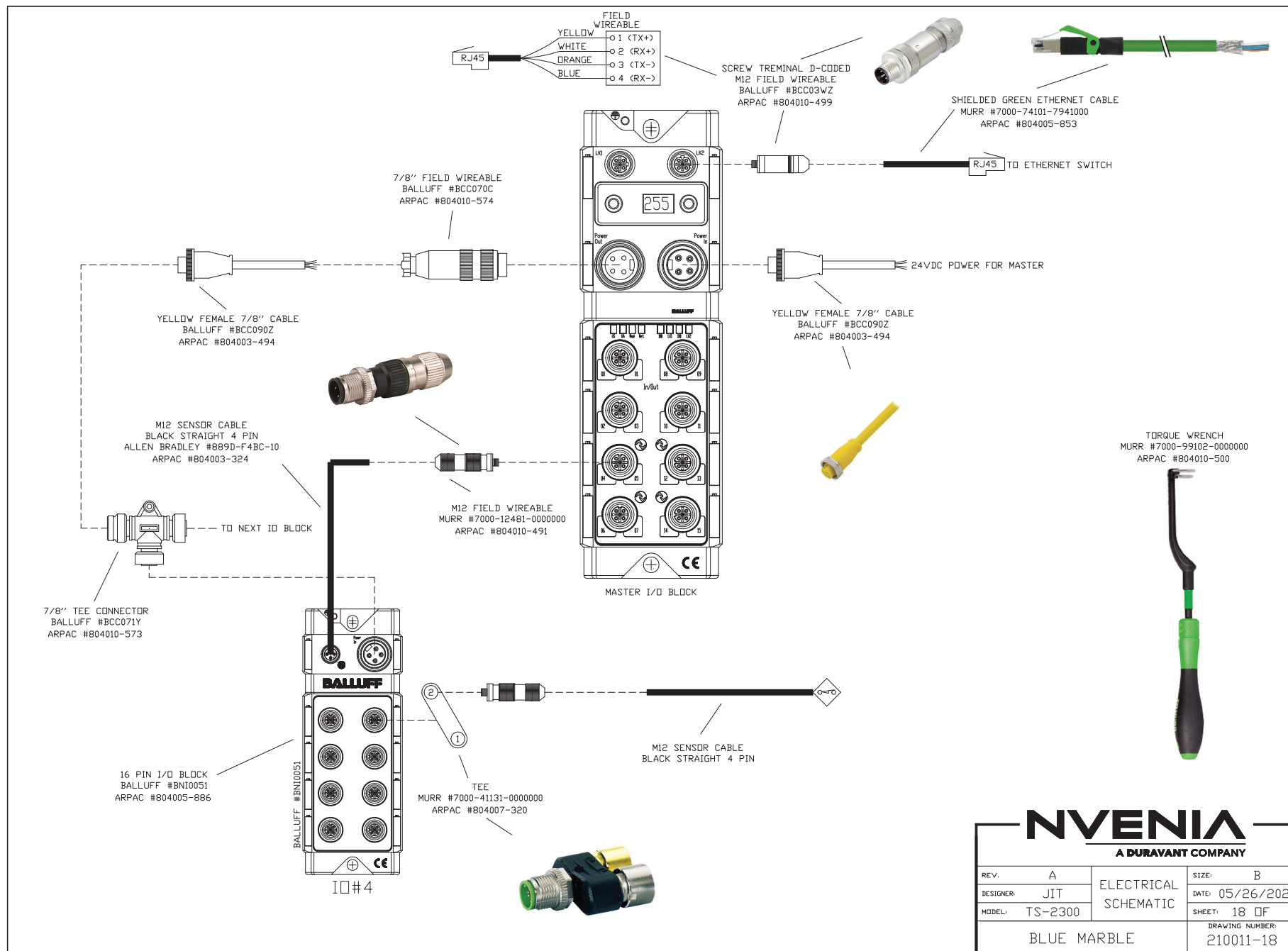
DOOR SWITCH

NVENIA
A DURAVANT COMPANY

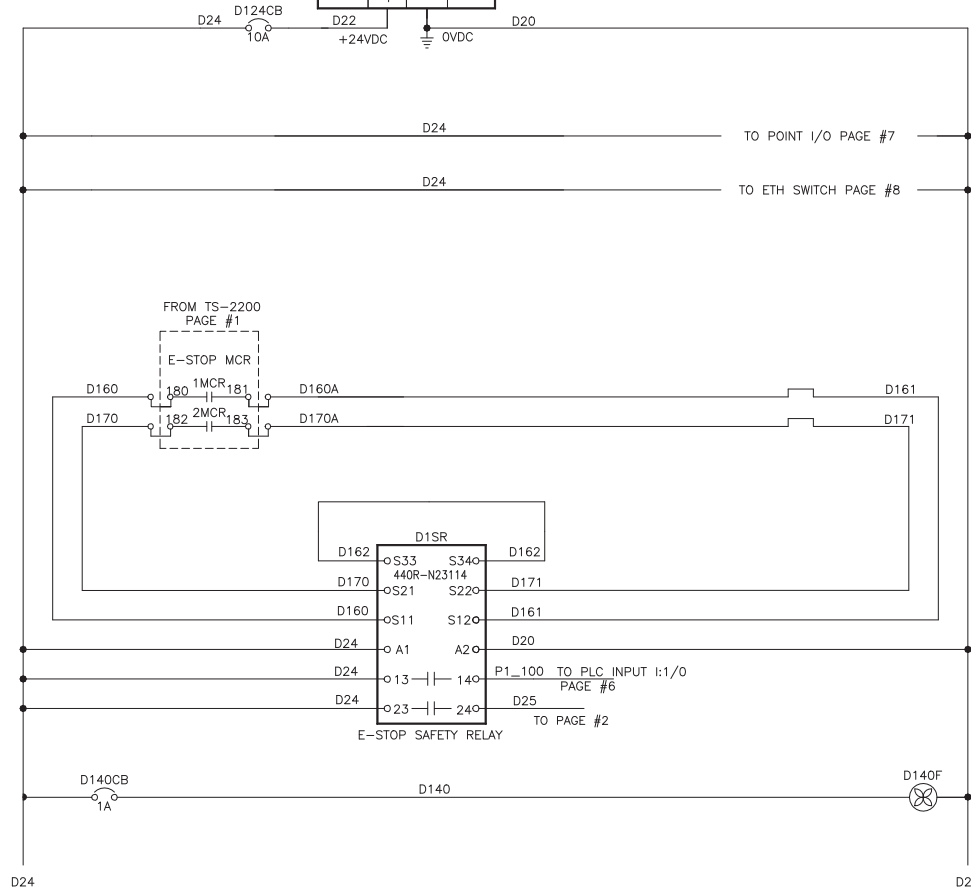
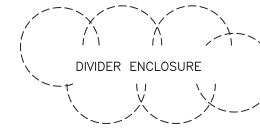
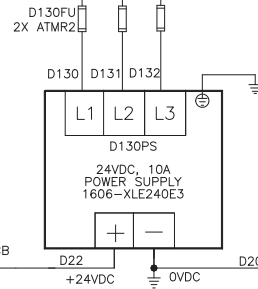
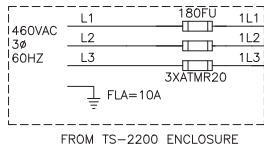
REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 15 OF
BLUE MARBLE		DRAWING NUMBER: 210011-15



NVENIA				
A DURAVANT COMPANY				
REV.	A	ELECTRICAL SCHEMATIC	SIZE:	B
DESIGNER:	JIT		DATE:	05/26/2021
MODEL:	TS-2300		SHEET:	17 OF
BLUE MARBLE			DRAWING NUMBER: 210011-17	

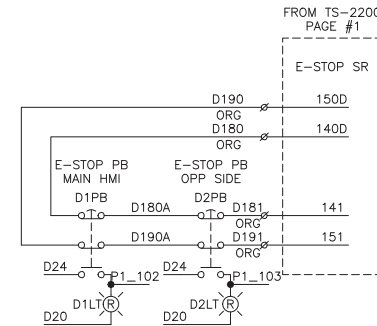


NVENIA			
A DURAVANT COMPANY			
REV. A	ELECTRICAL SCHEMATIC	SIZE: B	
DESIGNER: JIT		DATE: 05/26/2021	
MODEL: TS-2300		SHEET: 18 OF	
BLUE MARBLE		DRAWING NUMBER: 210011-18	



POINT I/O POWER SUPPLY

ETHERNET SWITCH



ENCLOSURE COOLING
FAN KIT
8.4W, 24VDC 0.35A

NVENIA
A DURAVANT COMPANY

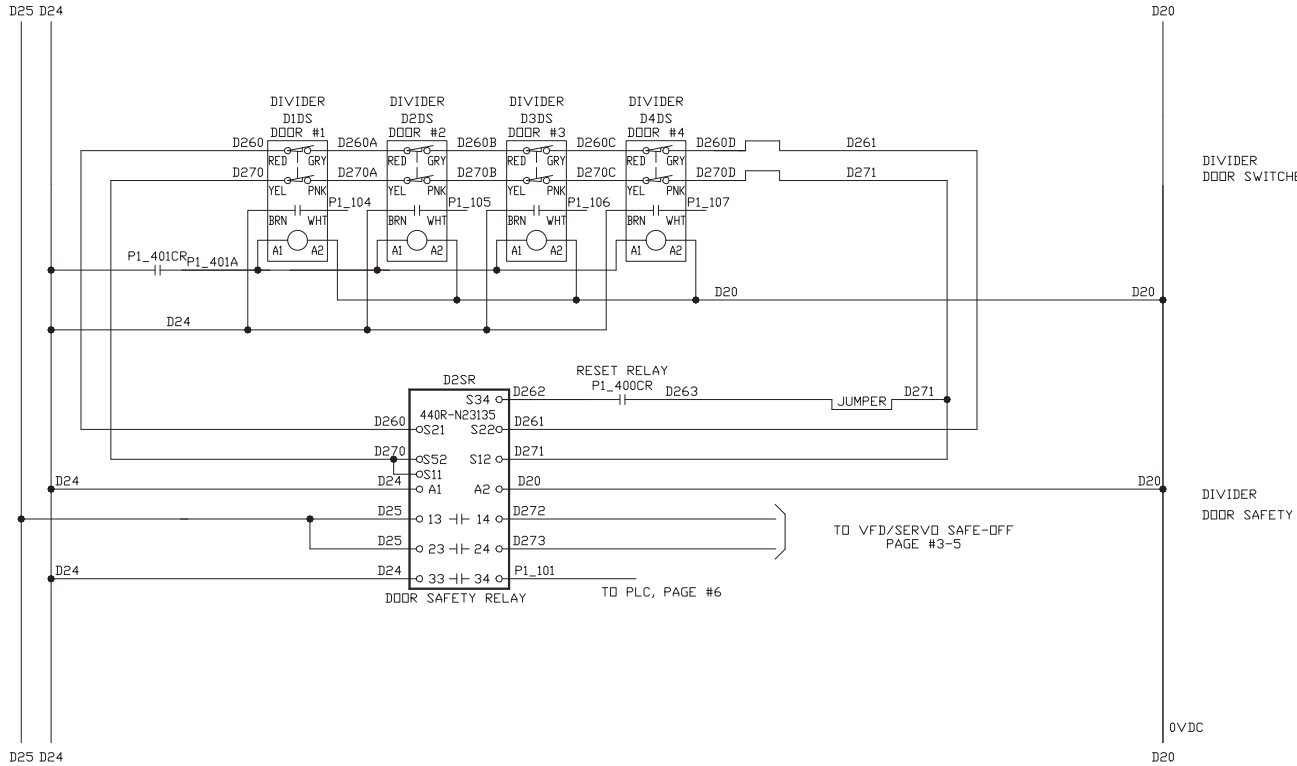
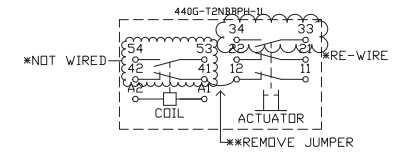
REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 1 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD01

DIVIDER ENCLOSURE

440G-T2NBBPH-1L LOCKABLE LOCKABLE DOOR SWITCH TERMINAL WIRING

TERMINAL	COLOR	DESCRIPTION
A1	GRN	SOLENOID POWER
A2	BLUE	0VDC POWER
11	RED	SAFETY A
12	RED/BLK	SAFETY A
21	RED/WHT	SAFETY B
22	RED/YEL	SAFETY B
33	BRN	+24 VDC
34	WHT	AUX. CONTACT (TO PLC)
41	N/A	*NOT CONNECTED
42	N/A	*NOT CONNECTED
53	N/A	*NOT CONNECTED
54	N/A	*NOT CONNECTED

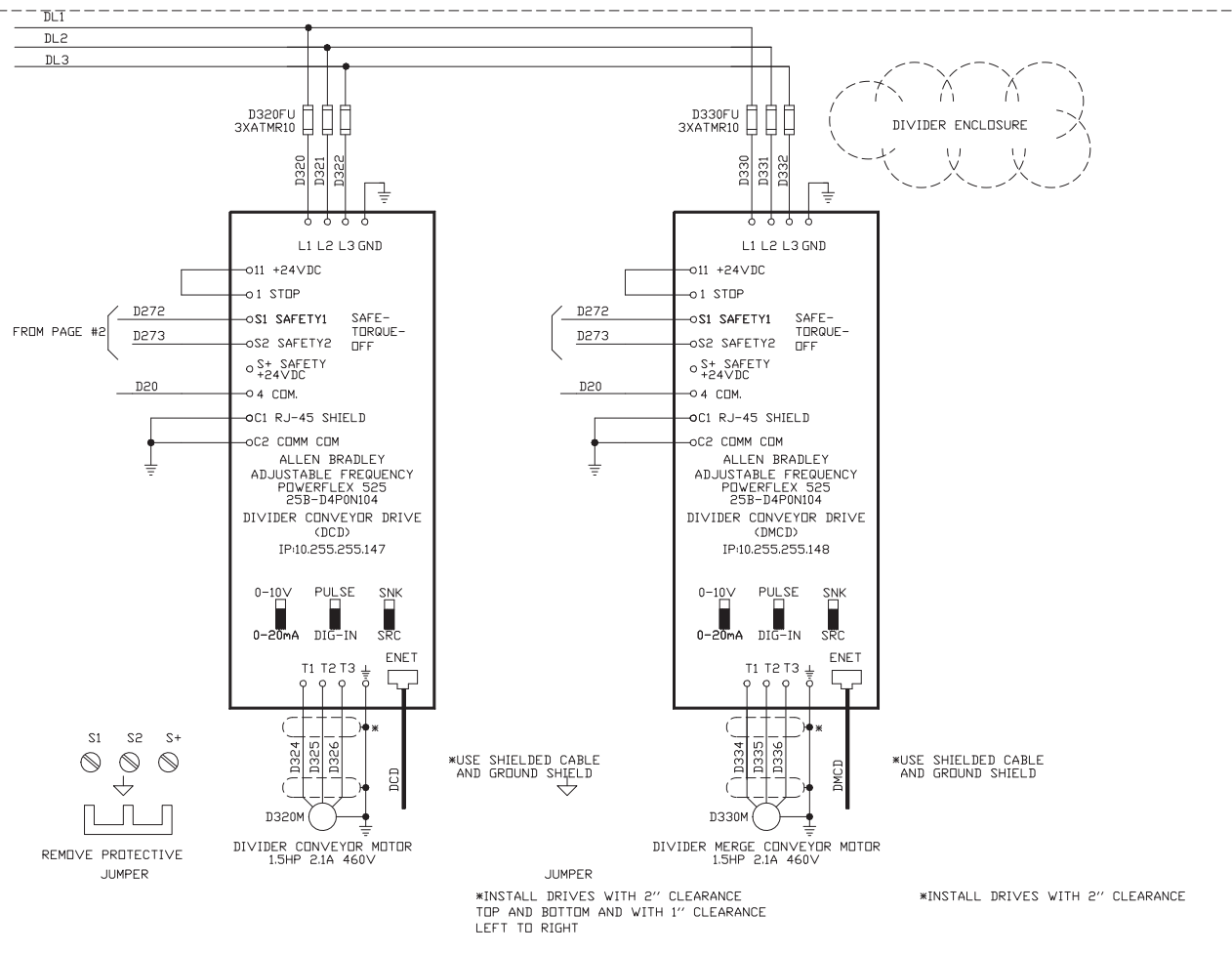
**REMOVE JUMPER BETWEEN 12 AND 41



NVENIA

A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 2 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD02



POWER FLEX 525 DRIVE SET UP
(DIFFERENT THAN DEFAULT)

DISPLAY	PARAMETER DESCRIPTIONS	SETTING
P031	RATED VOLTAGE	460
P033	MOTOR OL CURRENT	*
P046	START SOURCE 1	5 (ETH)
P047	SPEED REFERENCE 1	15 (ETH)
P041	ACCELERATION TIME	1 SEC
P042	DECELERATION TIME	1 SEC
P044	MAX FREQUENCY	90 HZ
A541	AUTO RESTART TRIES	0.0
A543	START AT POWER UP	1.0

* SET TO THE MAXIMUM ALLOWABLE MOTOR CURRENT

POWER FLEX 525 DRIVE SET UP
(DIFFERENT THAN DEFAULT)

DISPLAY	PARAMETER DESCRIPTIONS	SETTING
C128	EN ADDR SELECT	1
C129	EN IP ADDR CFG 1	10
C130	EN IP ADDR CFG 2	255
C131	EN IP ADDR CFG 3	255
C132	EN IP ADDR CFG 4	**
C133	EN SUBNET CFG 1	255
C134	EN SUBNET CFG 2	255
C135	EN SUBNET CFG 3	255
C136	EN SUBNET CFG 4	0

**SEE PAGE #8 FOR LAST IP NUMBER

0103CB
CIRCUIT BREAKER NUMBER
PAGE NUMBER

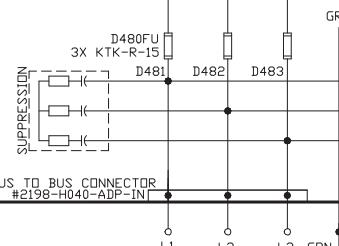
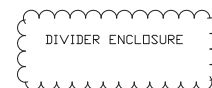
NVENIA
A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 04/20/2021
MODEL: TS-2300		SHEET: 3 OF
DRAWING NUMBER: 210011-DD01		
BLUE MARBLE		

FROM PAGE #1
460VAC

DL1
DL2
DL3

DL1
DL2
DL3



FROM PAGE #1
+24VDC
D24 D20

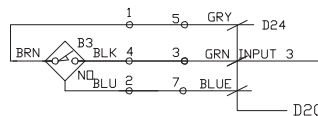
BUS SHARED POWER
TO DRIVE #2

BUS SHARED CONTROL POWER
TO DRIVE #2

BUS TO BUS CONNECTOR
#2198-H040-ADP-IN

GRN
(GROUND CHASIS
TO GROUND)

CONTROL POWER
1 2



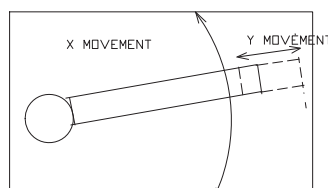
DIGITAL INPUTS
1 IN1
2 COM
3 IN2
4 SHLD

SAFE OFF

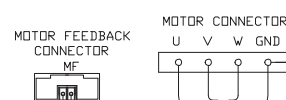
OSB+ BYPASS PLUS
OSB- BYPASS MINUS
S1 SAFETY ENABLE 1
SC SAFETY ENABLE COM
S2 SAFETY ENABLE 2

ALLEN BRADLEY
KINETIX 5500
2198-H015-ERS
AXIS MODULE
DIVIDER X SERVO CONTROLLER AND DRIVE
(DXSCD)

FROM PAGE #2
D272
D20
D273



*INSTALL WITH 1.6" CLEARANCE TOP AND BOTTOM



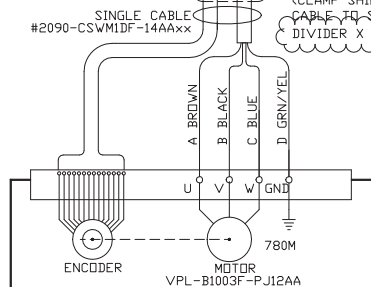
MOTOR BRAKE
11 (GROUND MOTOR
BRAKE CABLE
WHEN USED)
22

SINGLE CABLE
#2090-CSWM1DF-14AAxx

(CLAMP SHIELDED
CABLE TO SERVO)
DIVIDER X CABLE

DXSCD
(#1585J-M8CBJM-2)

DYSCD TO PAGE #5
(#1585J-M8CBJM-DM3)



FROM PAGE #8

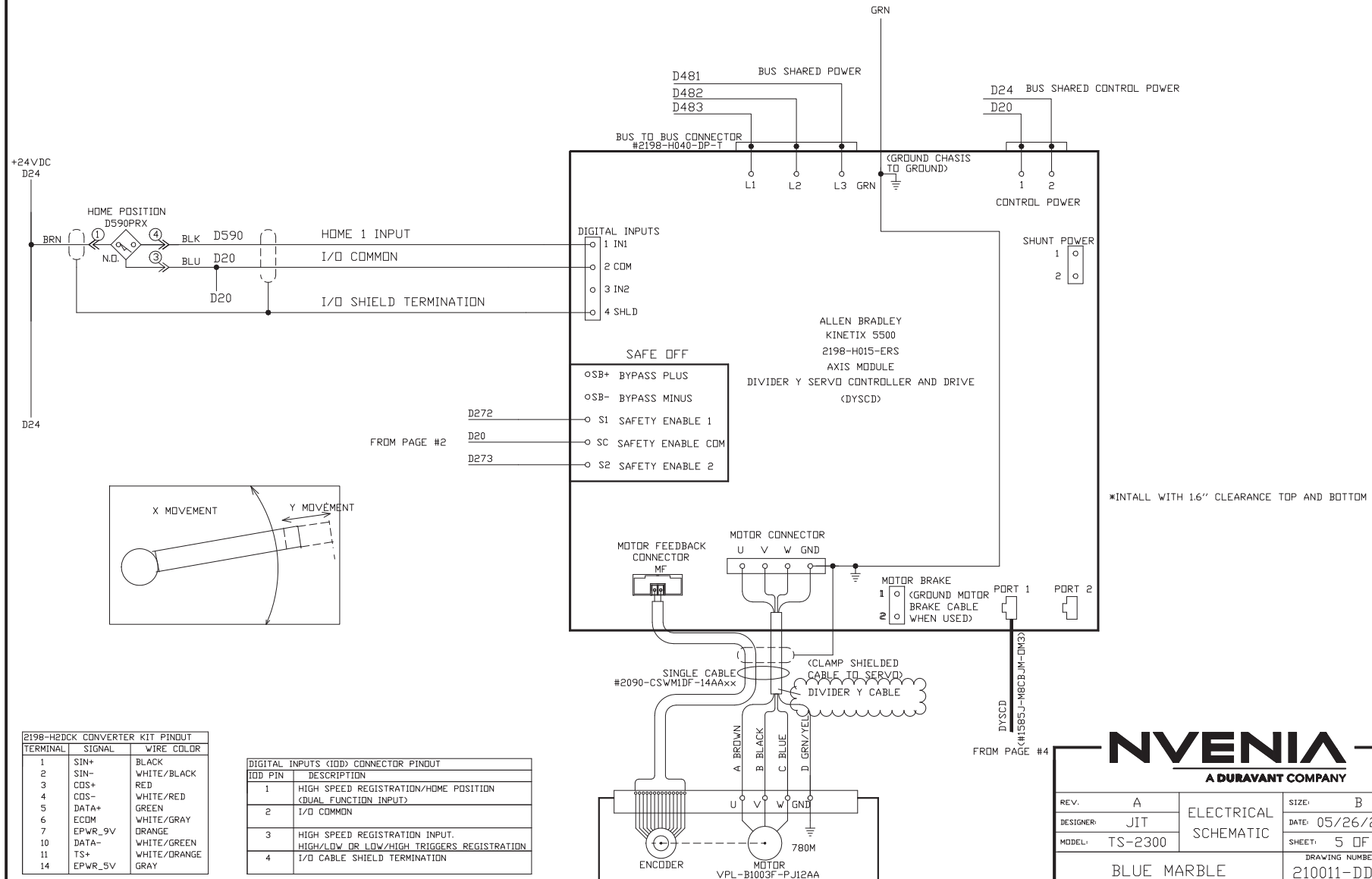
2198-H2DCK CONVERTER KIT PINDUT		
TERMINAL	SIGNAL	WIRE COLOR
1	SIN+	BLACK
2	SIN-	WHITE/BLACK
3	COS+	RED
4	COS-	WHITE/RED
5	ECOM	WHITE/GRAY
7	EPWR_9V	ORANGE
10	DATA-	WHITE/GREEN
11	TS+	WHITE/ORANGE
14	EPWR_5V	GRAY

DIGITAL INPUTS (IOD) CONNECTOR PINDUT	
IOD PIN	DESCRIPTION
1	HIGH SPEED REGISTRATION/HOME POSITION (DUAL FUNCTION INPUT)
2	I/O COMMON
3	HIGH SPEED REGISTRATION INPUT. HIGH/LOW OR LOW/HIGH TRIGGERS REGISTRATION
4	I/O CABLE SHIELD TERMINATION

NVENIA
A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 4 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD04

DIVIDER ENCLOSURE



2198-H2DCK CONVERTER KIT PINDUT		
TERMINAL	SIGNAL	WIRE COLOR
1	SIN+	BLACK
2	SIN-	WHITE/BLACK
3	COS+	RED
4	COS-	WHITE/RED
5	DATA+	GREEN
6	ECOM	WHITE/GRAY
7	EPWR_9V	ORANGE
10	DATA-	WHITE/GREEN
11	TS+	WHITE/ORANGE
14	EPWR_5V	GRAY

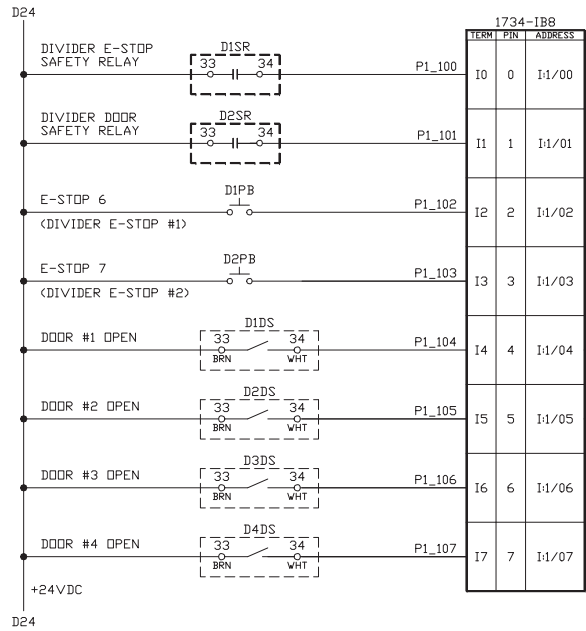
DIGITAL INPUTS (IOD) CONNECTOR PINDUT	
IOD PIN	DESCRIPTION
1	HIGH SPEED REGISTRATION/HOME POSITION (DUAL FUNCTION INPUT)
2	I/O COMMON
3	HIGH SPEED REGISTRATION INPUT. HIGH/LOW OR LOW/HIGH TRIGGERS REGISTRATION
4	I/O CABLE SHIELD TERMINATION

NVENIA
A DURAVANT COMPANY

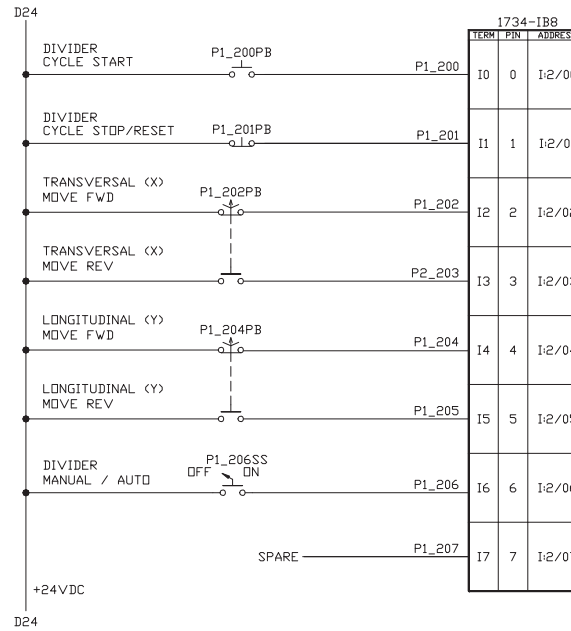
REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 5 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD05

DIVIDER ENCLOSURE

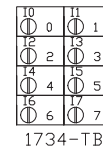
POINT I/O RACK #1 - INPUT MODULE #1



POINT I/O RACK #1 - INPUT MODULE #2



TERMINAL LAYOUT FOR 1734-IB8



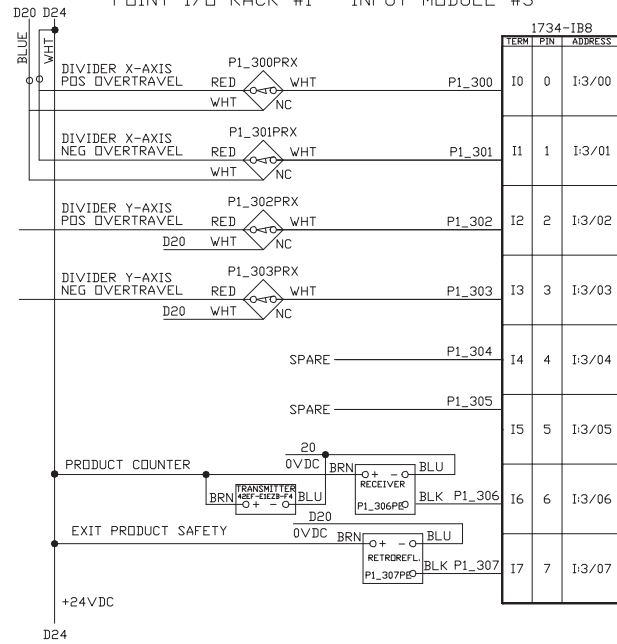
NVENIA

A DURAVANT COMPANY

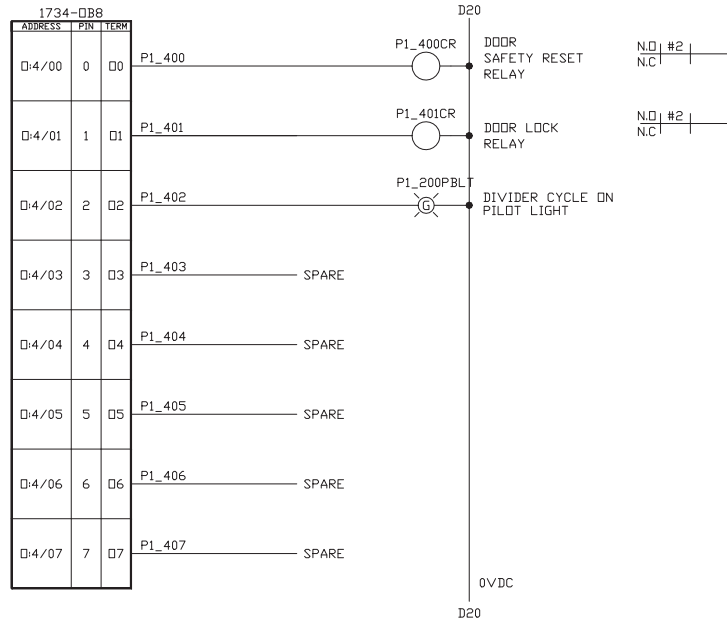
REV. A	ELECTRICAL SCHEMATIC	SIZE B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 6 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD06

DIVIDER ENCLOSURE

POINT I/O RACK #1 - INPUT MODULE #3



POINT I/O RACK #1 - OUTPUT MODULE #4

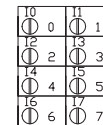


TERMINAL LAYOUT FOR 1734-DB8E



1734-TB

TERMINAL LAYOUT FOR 1734-IB8



1734-TB

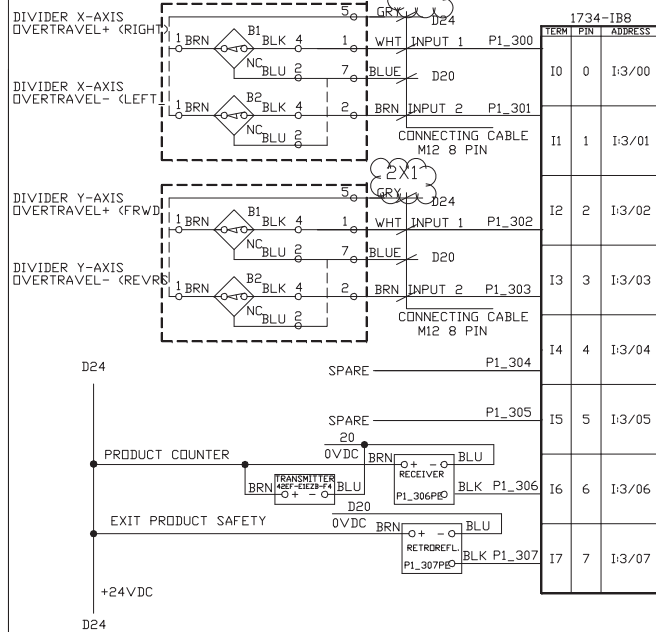
NVENIA
A DURAVANT COMPANY

REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 10/26/2021
MODEL: TS-2300		SHEET: 7 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD07

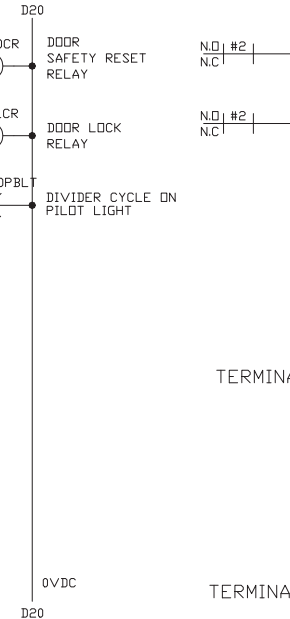
MULTI-PIN PLUG DISTRIBUTOR FESTO NEDU-L4R1-M8G3-M12G8

DIVIDER ENCLOSURE

POINT I/O RACK #1 - OUTPUT MODULE #4



ADDRESS	PIN	TERM
D:4/00	0	D0
D:4/01	1	D1
D:4/02	2	D2
D:4/03	3	D3
D:4/04	4	D4
D:4/05	5	D5
D:4/06	6	D6
D:4/07	7	D7



TERMINAL LAYOUT FOR 1734-DB8E

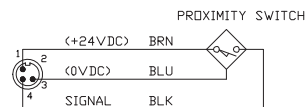
D0	D1
D2	D3
D4	D5
D6	D7

1734-TB

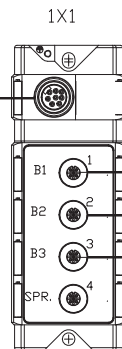
TERMINAL LAYOUT FOR 1734-IB8

I0	I1
I2	I3
I4	I5
I6	I7

1734-TB

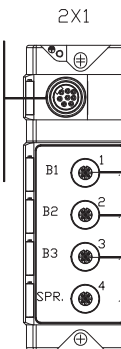


P1_300	INPUT 1	WHT
P1_301	INPUT 2	BRN
D490	INPUT 3	GRN
	INPUT 4	YEL
D24	UB+	GRY
	INPUT 5	PINK
D20	UB-	BLU
	INPUT 6	RD



DIVIDER AXIS X OVERTRAVEL + RIGHT
NC, SIES-8M-24V-K-2.5-M8D
DIVIDER AXIS X OVERTRAVEL - (LEFT)
NC, SIES-8M-24V-K-2.5-M8D
DIVIDER AXIS X HOME POSITION
NO, SIES-8M-24V-K-2.5-M8D
SERVO HOME INPUT P.

P1_302	INPUT 1	WHT
P1_303	INPUT 2	BRN
D590	INPUT 3	GRN
	INPUT 4	YEL
D24	UB+	GRY
	INPUT 5	PINK
D20	UB-	BLU
	INPUT 6	RD



DIVIDER AXIS Y OVERTRAVEL + FORWARD
NC, SIES-8M-24V-K-2.5-M8D
DIVIDER AXIS Y OVERTRAVEL - (REVERSE)
NC, SIES-8M-24V-K-2.5-M8D
DIVIDER AXIS Y HOME POSITION
NO, SIES-8M-24V-K-2.5-M8D
SERVO HOME INPUT P.

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REV.	A	ELECTRICAL	SIZE:	B
DESIGNER:	JIT	SCHEMATIC	DATE:	10/26/2021
MODEL:	TS-2300		SHEET:	7 OF
BLUE MARBLE			DRAWING NUMBER:	210011-DD07

DIVIDER ENCLOSURE

POINT I/O RACK #1 - INPUT MODULE #5

D24

1734-IB8		
TERM	PIN	ADDRESS
SPARE — P1_500	I0 0	I:5/00
SPARE — P1_501	I1 1	I:5/01
SPARE — P1_502	I2 2	I:5/02
SPARE — P1_503	I3 3	I:5/03
SPARE — P1_504	I4 4	I:5/04
SPARE — P1_505	I5 5	I:5/05
SPARE — P1_506	I6 6	I:5/06
SPARE — P1_507	I7 7	I:5/07

+24VDC

D24

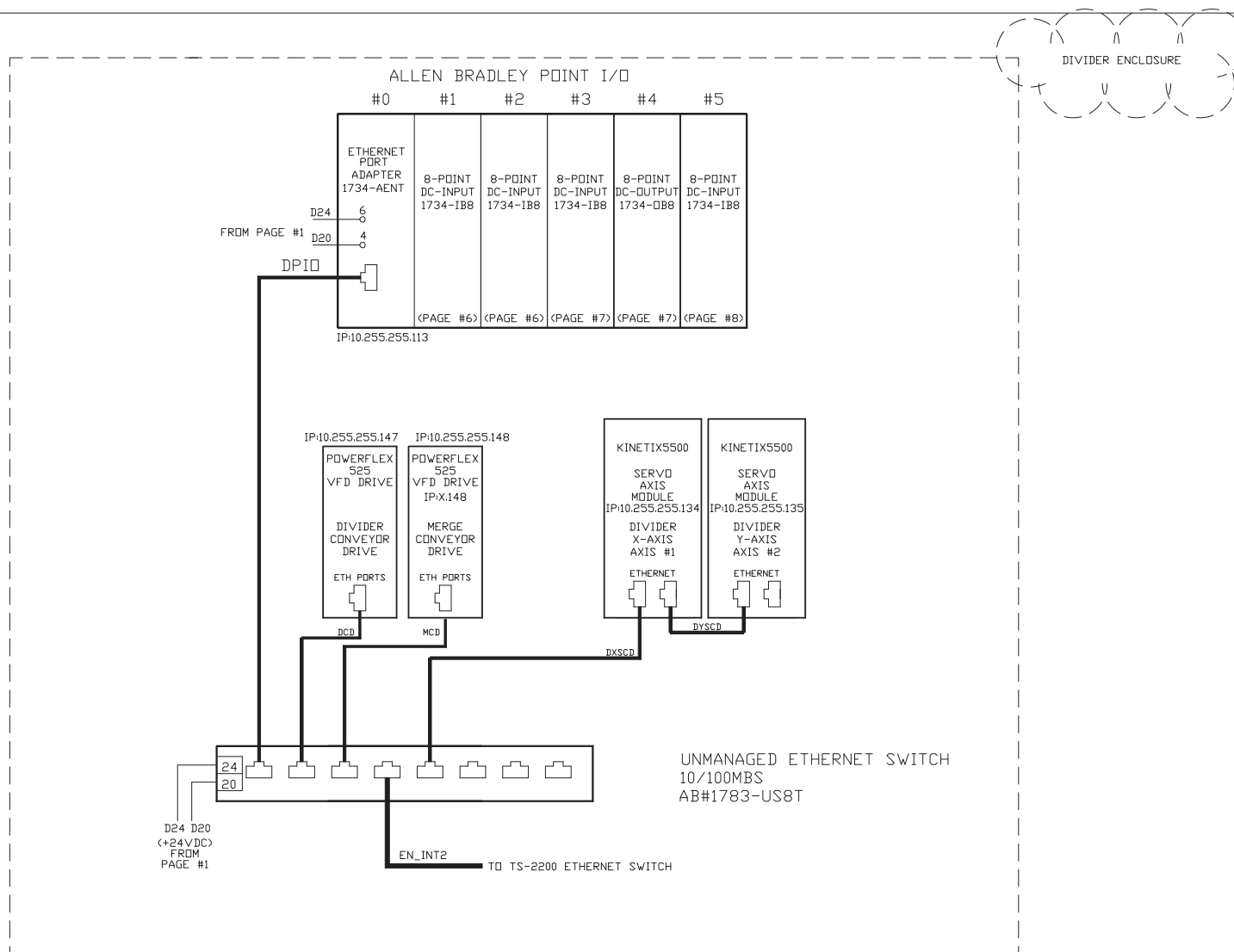
TERMINAL LAYOUT FOR 1734-IB8

10	11
0	1
12	13
2	3
14	15
4	5
16	17
6	7

1734-TB

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REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 8 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD08



NVENIA		
A DURAVANT COMPANY		
REV. A	ELECTRICAL SCHEMATIC	SIZE: B
DESIGNER: JIT		DATE: 05/26/2021
MODEL: TS-2300		SHEET: 9 OF
BLUE MARBLE		DRAWING NUMBER: 210011-DD09