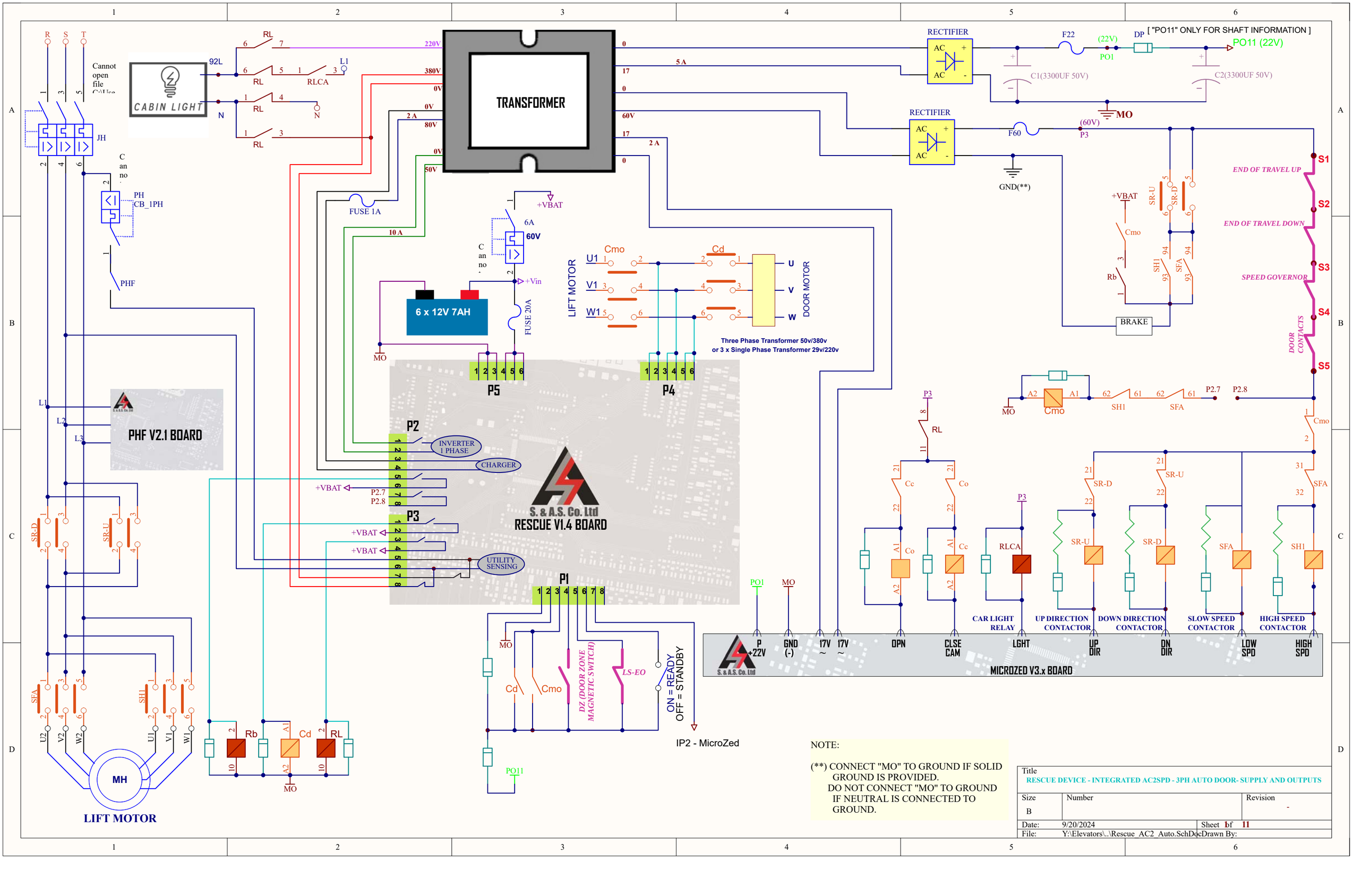


NOTE:

(**) CONNECT "MO" TO GROUND IF SOLID GROUND IS PROVIDED.
DO NOT CONNECT "MO" TO GROUND IF NEUTRAL IS CONNECTED TO GROUND.

Title: RESCUE DEVICE - INTEGRATED AC2SPD - 3PH AUTO DOOR- SUPPLY AND OUTPUTS		
Size: B	Number:	Revision: -
Date: 9/20/2024	Sheet bf 11	
File: Y:\Elevators\..\Rescue_AC2_Auto.SchDoc	Drawn By:	

CABIN LIGHT

92L

N

RL

RLCA

L1

R S T

Cannot open file

JH

PH CB_1PH

PHF

L1 L2 L3

PHF V2.1 BOARD

SR-D SR-U

SFA SH1

U2 V2 W2 U1 V1 W1

MH

LIFT MOTOR

TRANSFORMER

220V 380V 0V 0V 2 A 80V 0V 50V

0V 5 A 17V 0V 60V 17V 2 A 0V

FUSE 1A

10 A

6A 60V

+VBAT

+Vin

6 x 12V 7AH

FUSE 20A

MO

P5 P4

P2

INVERTER 1 PHASE

CHARGER

+VBAT

P2.7 P2.8

P3

UTILITY SENSING

S. & A.S. Co. Ltd

RESCUE V1.4 BOARD

P1

Rb Cd RL

SV

CAM

Cd Cmo DZ (DOOR ZONE MAGNETIC SWITCH) LS-EO

ON = READY
OFF = STANDBY

IP2 - MicroZed

LIFT MOTOR U1 V1 W1

DOOR MOTOR U V W

Cmo Cd

Three Phase Transformer 50v/380v
or 3 x Single Phase Transformer 29v/220v

RECTIFIER

AC + AC -

F22 (22V) DP

["PO11" ONLY FOR SHAFT INFORMATION]

PO1 PO11 (22V)

C1(3300UF 50V) C2(3300UF 50V)

MO

F60 (60V) P3

GND(**)

+VBAT

Cmo Rb

SR-U SR-D SH1 SFA

BRAKE

S1 END OF TRAVEL UP

S2 END OF TRAVEL DOWN

S3 SPEED GOVERNOR

S4 DOOR CONTACTS

S5 LOCK CONTACTS

S6

RD

A2 A1 62 61 62 61 p2.7 p2.8

SH1 SFA

Cmo

RL

Cc Co

Sv RLCA

SR-D SR-U SFA SH1

CAM CAR LIGHT RELAY UP DIRECTION CONTACTOR DOWN DIRECTION CONTACTOR SLOW SPEED CONTACTOR HIGH SPEED CONTACTOR

P +22V GND (-) 17V ~ 17V ~ OPN CLSE CAM SPRE 2 LGHT UP DIR DN DIR LOW SPD HIGH SPD

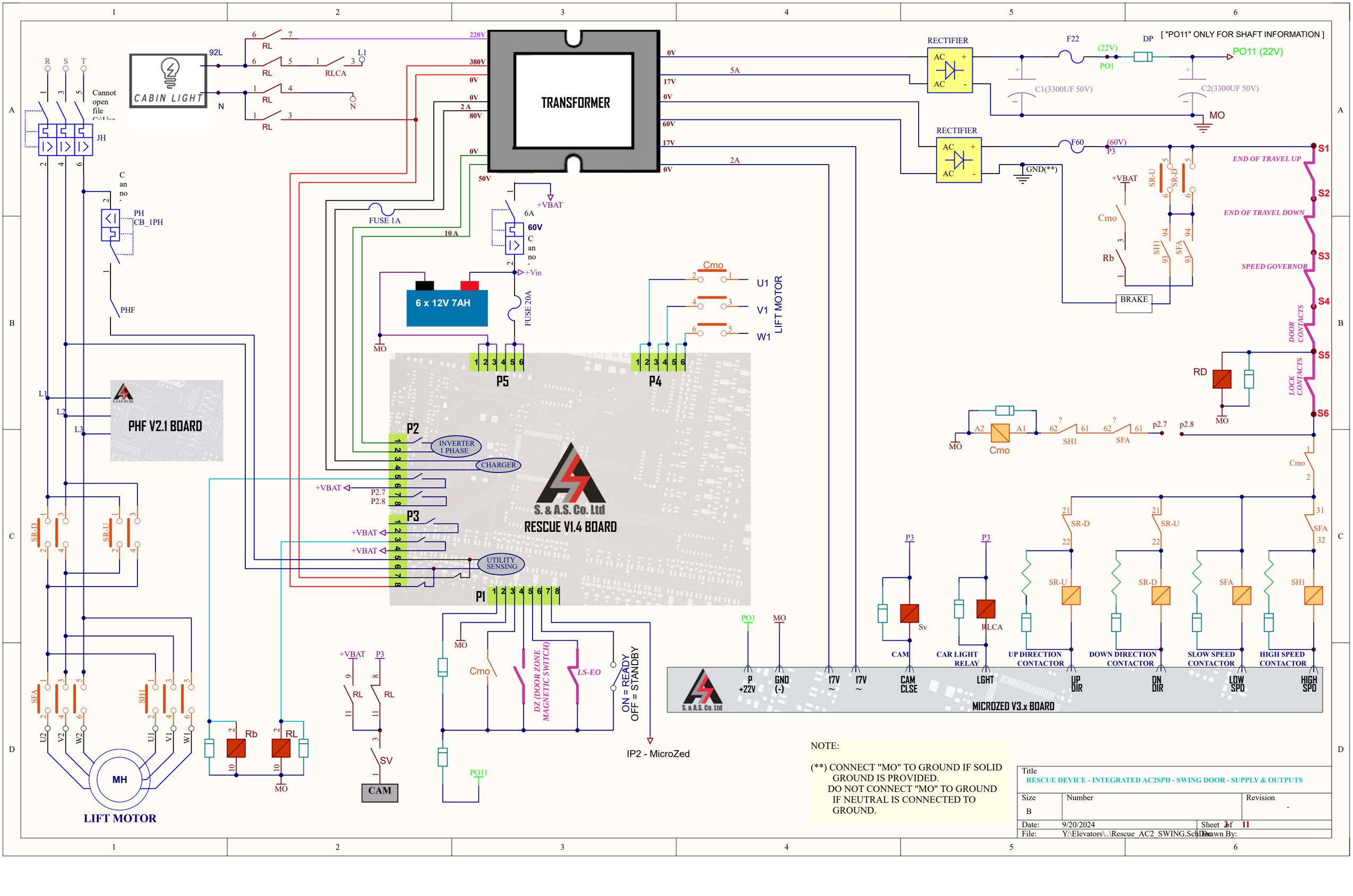
S. & A.S. Co. Ltd

MICROZED V3.x BOARD

NOTE:

(**) CONNECT "MO" TO GROUND IF SOLID GROUND IS PROVIDED.
DO NOT CONNECT "MO" TO GROUND IF NEUTRAL IS CONNECTED TO GROUND.

Title	RESCUE DEVICE - INTEGRATED AC2SPD - 3PH 1/2 AUTO DOOR - SUPPLY & OUTPUTS	
Size: B	Number:	Revision: -
Date: 9/20/2024	Sheet 2 of 11	
File: Y:\Elevators\...\Rescue_AC2_Half-Auto.SchDoc	Drawn By:	



NOTE:

(**) CONNECT "MO" TO GROUND IF SOLID GROUND IS PROVIDED.
DO NOT CONNECT "MO" TO GROUND IF NEUTRAL IS CONNECTED TO GROUND.

Title: RESCUE DEVICE - INTEGRATED AC2SPD - SWING DOOR - SUPPLY & OUTPUTS		
Size: B	Number:	Revision: -
Date: 9/20/2024	Sheet 3 of 11	
File: Y:\Elevators\..\Rescue_AC2_SWING.Sch.Doc	Drawn By:	

L2 L1

CABIN LIGHT

6A PH

Can no

RL2

TRANSFORMER

CAR LIGHT

LIFT CONTROL PANEL

P3 (60V) 1102 SAFETY CIRCUIT 1190 COILS

+VBAT

RL

220V

380V

0V

0V

2 A

80V

0V

5 A

50V

FUSE 1A

TRANSFORMER 740 VA

+VBAT

6A

+Vin

6 x 12V 7AH

FUSE 20A

MO

P5

P4

P2

INVERTER 1 PHASE

CHARGER

+VBAT

P3

+VBAT

+VBAT

UTILITY SENSING

S. & A.S. Co. Ltd

RESCUE V1.4 BOARD

P1

W2 V2 U2

LIFT MOTOR

MH

Cmo

W1 V1 U1

Cd

DOOR MOTOR

U V W

MH

Three Phase Transformer 50v/380v
or 3 x Single Phase Transformer 29v/220v

Rb Cmo Cd RL2 RL

MO

+VBAT

Cmo

Rb

BRAKE

MO

Cd Cmo DZ (DOOR ZONE MAGNETIC SWITCH) LS-EO*

ON = READY
OFF = STANDBY

(*) Optional: If not connected set LS override delay to 5 seconds.

Title: RESCUE DEVICE - STAND ALONE 3 PHASE AUTO DOOR		
Size: B	Number:	Revision: -
Date: 9/20/2024		Sheet 4 of 11
File: Y:\Elevators\..\Rescue_Auto_3ph.SchDoc		Drawn By:

L2 L1

CABIN LIGHT

11 9 / 11 8 RL2

11 9 / 11 8 RL2

6A PH

C an no

1 4 RL2

6 5 RL2

TRANSFORMER CAR LIGHT

LIFT CONTROL PANEL

P3 (60V) 1102 SAFETY CIRCUIT 1190 COILS

4 1 RL

3 1 RL

6 5 RL

6 7 RL

220V 380V 0V 0V 2 A 80V 0V 5 A 50V

FUSE 1 A

TRANSFORMER 740 VA

+VBAT

6A

60V

+Vin

6 x 12V 7AH

FUSE 20A

MO

P5 1 2 3 4 5 6

P4 1 2 3 4 5 6

P2 1 2 3 4 5 6 7 8

INVERTER 1 PHASE

CHARGER

+VBAT

P3 1 2 3 4 5 6 7 8

+VBAT

+VBAT

UTILITY SENSING

S. & A.S. Co. Ltd

RESCUE V1.4 BOARD

P1 1 2 3 4 5 6 7 8

W2 V2 U2

LIFT MOTOR MH

Cmo 2 1 W1 / 4 3 V1 / 6 5 U1

Cd 2 1 U / 4 3 V / 6 5 W

DOOR MOTOR MH

Three Phase Transformer 50v/380v
or 3 x Single Phase Transformer 29v/220v

Rb 2 10

Rcam 2 10

Cmo A1 A2

Cd A1 A2

RL2 2 10

RL 2 10

MO

+VBAT

Cmo 3 Rcam 1

Rb

BRAKE CAM

MO

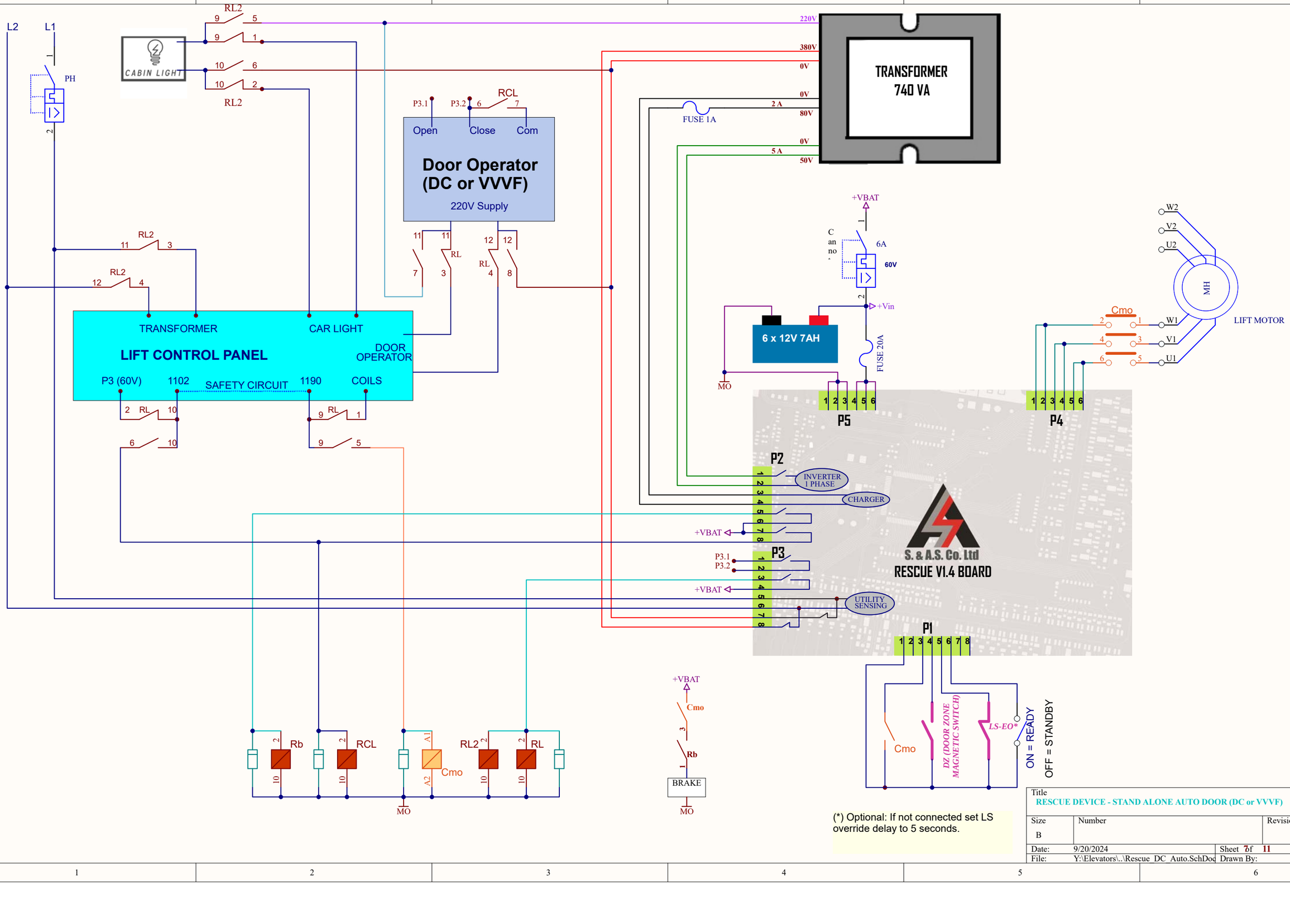
Cd Cmo DZ (DOOR ZONE MAGNETIC SWITCH) LS-EO

ON = READY
OFF = STANDBY

Title: RESCUE DEVICE - STAND ALONE 1/2 3 PHASE AUTO DOOR		
Size: B	Number:	Revision: -
Date: 9/20/2024	Sheet 5 of 11	
File: Y:\Elevators\..\Rescue_Half-Auto_3ph.Sch.Doc	Drawn By:	

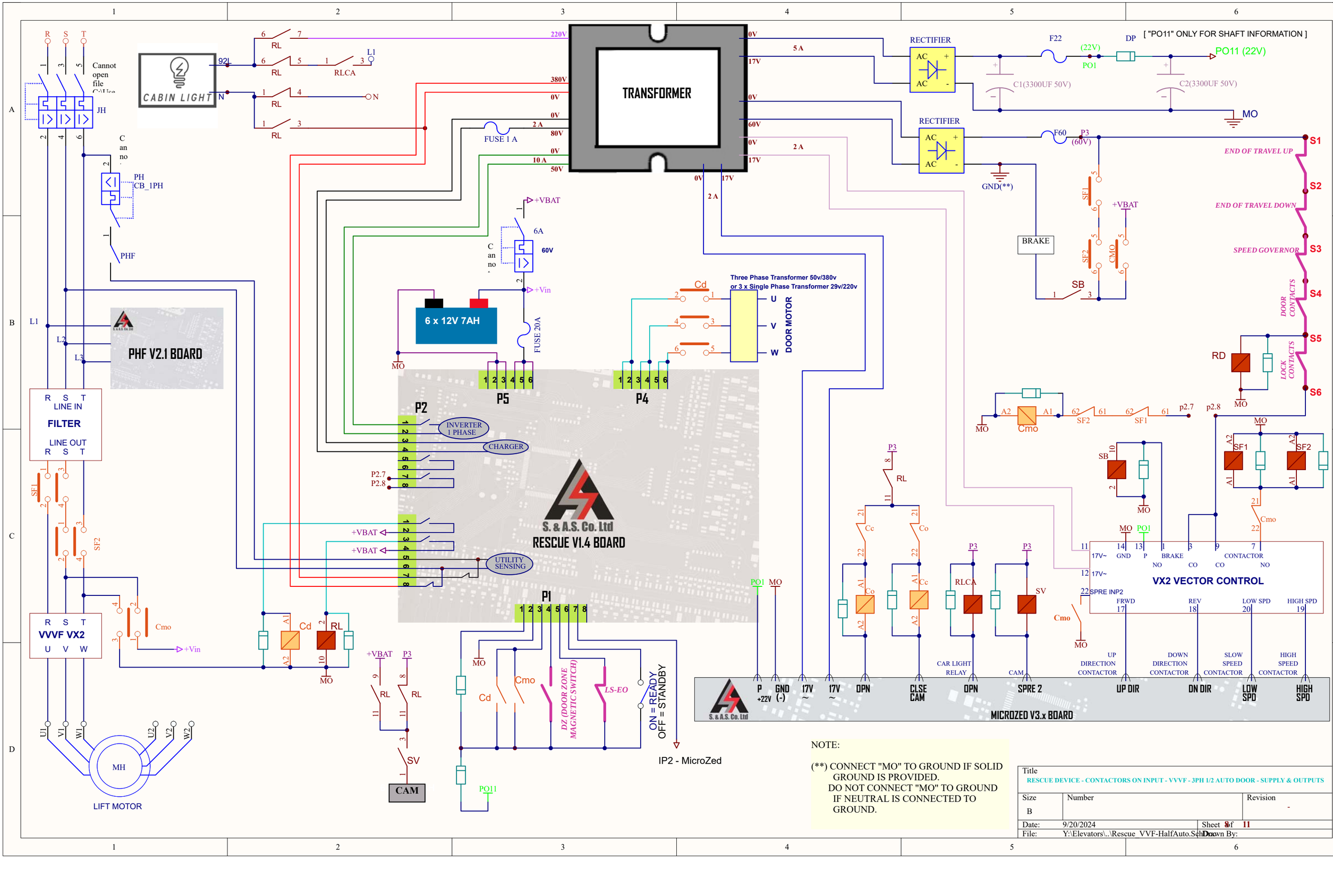
L2
L1
CABIN LIGHT
11
9
11
8
RL
11
9
11
8
RL2
6A
PH
C
an
no
-
1
2
1
4
RL2
6
5
RL2
TRANSFORMER
CAR LIGHT
LIFT CONTROL PANEL
P3 (60V)
1102
SAFETY CIRCUIT
1190
COILS
4
1
RL
6
5
RL
3
1
RL
6
7
RL
220V
380V
0V
0V
2 A
80V
FUSE 1 A
0V
5 A
50V
TRANSFORMER
740 VA
+VBAT
1
6A
60V
2
+Vin
6 x 12V 7AH
FUSE 20A
MO
P2
1 2 3 4 5 6
P4
1 2 3 4 5 6
W2
V2
U2
MH
Cmo
2
1
W1
4
3
V1
6
5
U1
LIFT MOTOR
1 2 3 4 5 6 7 8
INVERTER
1 PHASE
CHARGER
+VBAT
S. & A.S. Co. Ltd
RESCUE V1.4 BOARD
1 2 3 4 5 6 7 8
+VBAT
UTILITY
SENSING
P1
1 2 3 4 5 6 7 8
2
Rb
10
2
Rcam
10
A1
A2
Cmo
RL2
2
10
2
RL
10
MO
+VBAT
Cmo
3
Rcam
Rb
1
BRAKE
CAM
MO
Cmo
DZ (DOOR ZONE
MAGNETIC SWITCH)
ON = READY
OFF = STANDBY

Title	RESCUE DEVICE - STAND ALONE SWINGING DOOR		
Size	Number		Revision
B			-
Date:	9/20/2024	Sheet 6 of 11	
File:	Y:\Elevators\..\Rescue_Swing.SchDoc	Drawn By:	



(*) Optional: If not connected set LS override delay to 5 seconds.

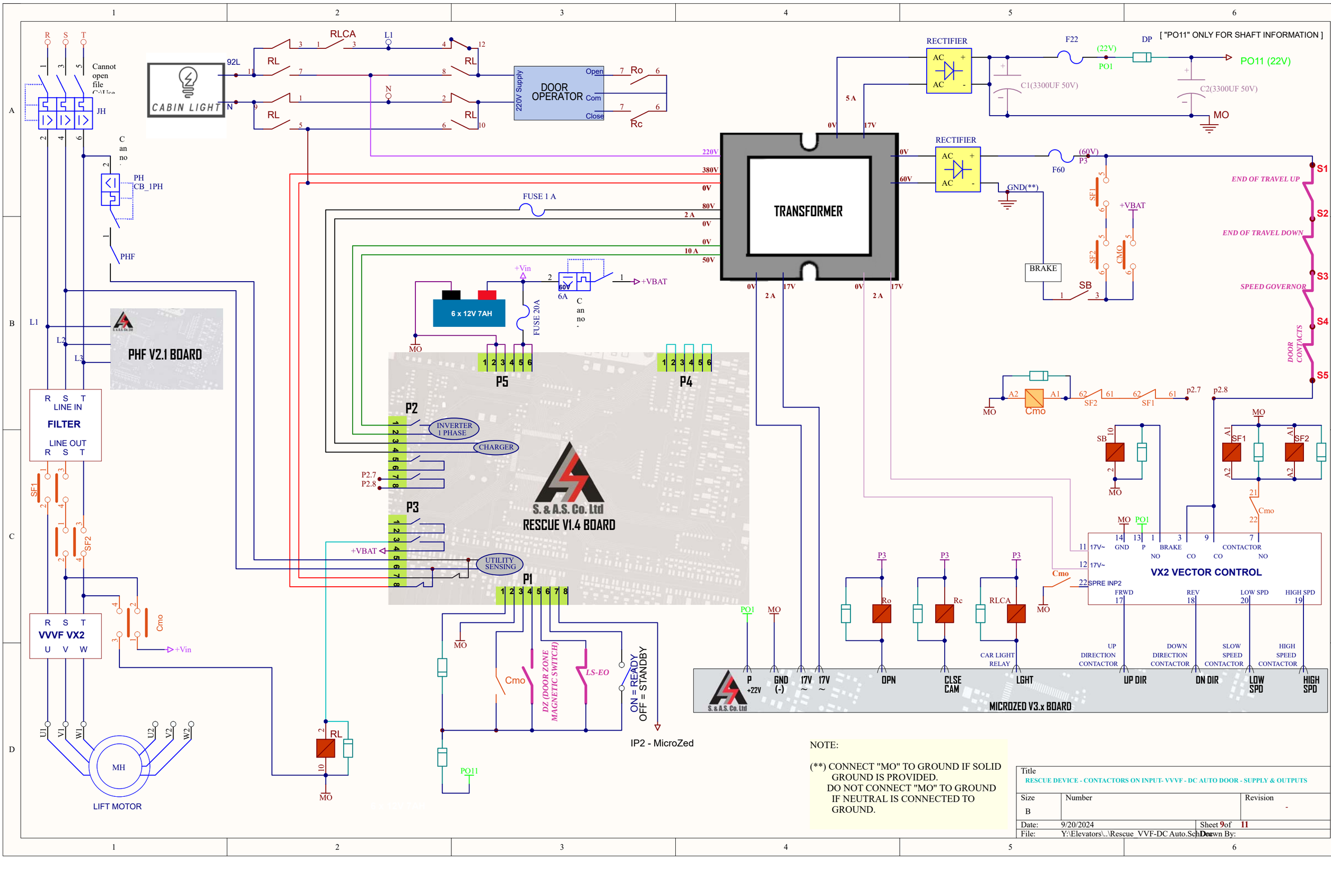
Title	RESCUE DEVICE - STAND ALONE AUTO DOOR (DC or VVVF)	
Size: B	Number:	Revision: -
Date: 9/20/2024		Sheet 7 of 11
File: Y:\Elevators\..\Rescue_DC_Auto.SchDoc		Drawn By:



NOTE:

(**) CONNECT "MO" TO GROUND IF SOLID GROUND IS PROVIDED.
DO NOT CONNECT "MO" TO GROUND IF NEUTRAL IS CONNECTED TO GROUND.

Title	RESCUE DEVICE - CONTACTORS ON INPUT - VVVF - 3PH I/2 AUTO DOOR - SUPPLY & OUTPUTS	
Size: B	Number:	Revision: -
Date: 9/20/2024	Sheet 8 of 11	
File: Y:\Elevators\...\Rescue_VVF-HalfAuto.Sch	Drawn By:	

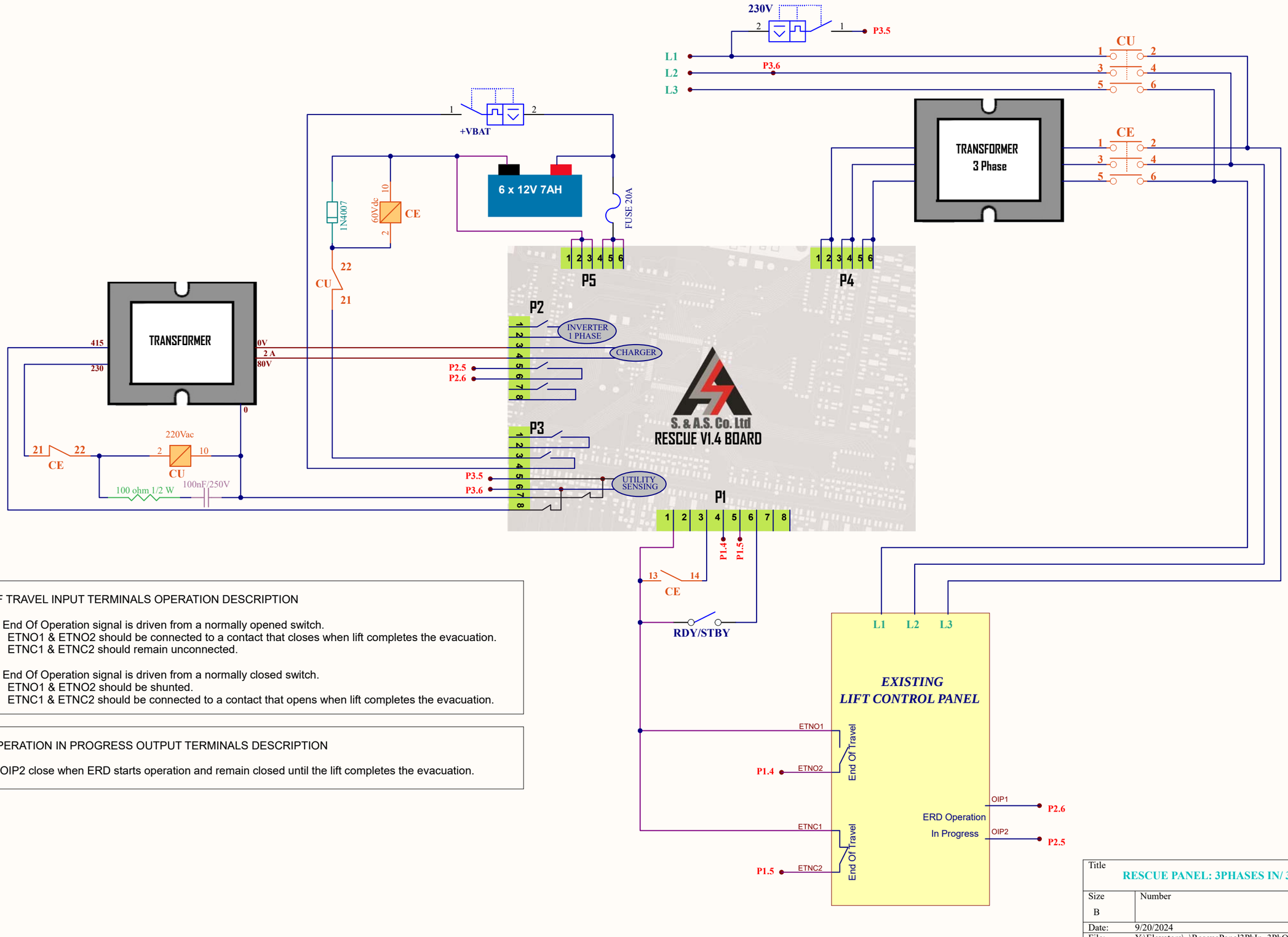

["PO11" ONLY FOR SHAFT INFORMATION]
R S T
Cannot open file
JH
CABIN LIGHT
92L
N
RLCA
L1
RL
N
220V Supply
DOOR OPERATOR
Open
Com
Close
Ro
Rc
PH
CB_1PH
PHF
L1
L2
L3
PHF V2.1 BOARD
R S T
LINE IN
FILTER
LINE OUT
R S T
SF1
SF2
R S T
VVVF VX2
U V W
Cmo
+Vin
U1
V1
W1
U2
V2
W2
MH
LIFT MOTOR
RL
MO
FUSE 1 A
220V
380V
0V
80V
2 A
0V
0V
10 A
50V
TRANSFORMER
5 A
0V
17V
RECTIFIER
AC
AC
+
-
F22
(22V)
PO1
DP
PO11 (22V)
C1(3300UF 50V)
C2(3300UF 50V)
MO
0V
60V
RECTIFIER
F60
(60V)
P3
GND(**)
+VBAT
SF1
SF2
CMO
BRAKE
SB
+Vin
60V
6A
+VBAT
6 x 12V 7AH
FUSE 20A
MO
P5
P4
P2
INVERTER 1 PHASE
CHARGER
P2.7
P2.8
P3
+VBAT
UTILITY SENSING
P1
S. & A.S. Co. Ltd
RESCUE V1.4 BOARD
Cmo
DZ (DOOR ZONE MAGNETIC SWITCH)
LS-EO
ON = READY
OFF = STANDBY
IP2 - MicroZed
PO11
END OF TRAVEL UP
END OF TRAVEL DOWN
SPEED GOVERNOR
DOOR CONTACTS
S1
S2
S3
S4
S5
A2
A1
Cmo
62
61
SF2
SF1
p2.7
p2.8
MO
SB
10
2
A1
A2
SF1
SF2
21
Cmo
22
MO
PO1
14
13
1
3
9
7
11
12
17V~
17V~
22
SPRE INP2
GND
P
BRAKE
CONTACTOR
NO
CO
CO
NO
VX2 VECTOR CONTROL
FRWD
REV
LOW SPD
HIGH SPD
17
18
20
19
P3
Ro
Rc
RLCA
Cmo
MO
CAR LIGHT RELAY
UP DIRECTION CONTACTOR
DOWN DIRECTION CONTACTOR
SLOW SPEED CONTACTOR
HIGH SPEED CONTACTOR
PO1
MO
P +22V
GND (-)
17V ~
17V ~
OPN
CLSE CAM
LGHT
UP DIR
DN DIR
LOW SPD
HIGH SPD
S. & A.S. Co. Ltd
MICROZED V3.x BOARD
NOTE:
(**) CONNECT "MO" TO GROUND IF SOLID GROUND IS PROVIDED.
DO NOT CONNECT "MO" TO GROUND IF NEUTRAL IS CONNECTED TO GROUND.
Title
RESCUE DEVICE - CONTACTORS ON INPUT- VVVF - DC AUTO DOOR - SUPPLY & OUTPUTS
Size
B
Number
Revision
-
Date:
9/20/2024
Sheet 9 of 11
File:
Y:\Elevators\...\Rescue_VVF-DC Auto.Sch.Doc
Drawn By:

R S T
Cannot open file
JH
CABIN LIGHT
92L
N
RLCA
L1
RL
N
220V Supply
DOOR OPERATOR
Open
Com
Close
Ro
Rc
220V
380V
0V
80V
2 A
0V
0V
10 A
50V
TRANSFORMER
5 A
0V
17V
RECTIFIER
AC
AC
+
-
F22
(22V)
PO1
DP
["PO11" ONLY FOR SHAFT INFORMATION]
PO11 (22V)
C1(3300UF 50V)
C2(3300UF 50V)
MO
RECTIFIER
0V
60V
(60V)
P3
F60
GND(**)
PH
CB_1PH
PHF
FUSE 1A
PHF V2.1 BOARD
L1
L2
L3
+Vin
60V
+VBAT
6A
6 x 12V 7AH
FUSE 20A
MO
P5
P4
P2
INVERTER 1 PHASE
CHARGER
S. & A.S. Co. Ltd
RESCUE V1.4 BOARD
P3
+VBAT
UTILITY SENSING
P1
BRAKE
SB
SF1
SF2
CMO
S1
END OF TRAVEL UP
S2
END OF TRAVEL DOWN
S3
SPEED GOVERNOR
S4
DOOR CONTACTS
S5
R S T
LINE IN
FILTER
LINE OUT
R S T
Cin
Cmo
+Vin
R S T
VVVF VX2
U V W
SF1
SF2
U1 V1 W1 U2 V2 W2
MH
LIFT MOTOR
P3
RL
14
12
22
Cin
21
Cmo
22
Cmo
21
Cin
2
RL
10
MO
P1
MO
Cmo
DZ (DOOR ZONE MAGNETIC SWITCH)
LS-EO
ON = READY
OFF = STANDBY
IP2 - MicroZed
PO1
MO
P3
Ro
P3
Rc
P3
RLCA
Cmo
MO
CAR LIGHT RELAY
SB
MO
SF1
SF2
A2
A1
A2
A1
MO
MO PO1
14 GND
13 P
1 BRAKE NO
3 CO
9 CO
7 CONTACTOR NO
11 17V~
12 17V~
22 SPRE INP2
VX2 VECTOR CONTROL
17 FRWD UP DIRECTION CONTACTOR
18 REV DOWN DIRECTION CONTACTOR
20 LOW SPD SLOW SPEED CONTACTOR
19 HIGH SPD HIGH SPEED CONTACTOR
P +22V
GND (-)
17V ~
17V ~
OPN
CLSE CAM
LGHT
UP DIR
DN DIR
LOW SPD
HIGH SPD
S. & A.S. Co. Ltd
MICROZED V3.x BOARD

NOTE:

(**) CONNECT "MO" TO GROUND IF SOLID GROUND IS PROVIDED.
DO NOT CONNECT "MO" TO GROUND IF NEUTRAL IS CONNECTED TO GROUND.

Title: RESCUE DEVICE - CONTACTORS ON OUTPUT- VVVF - DC AUTO DOOR - SUPPLY & OUTPUTS		
Size: B	Number:	Revision: -
Date: 9/20/2024	Sheet 10 of 11	
File: Y:\Elevators\..\Rescue_VVF-DC Auto - Contactors On Output.SchDoc	Drawn By:	



END OF TRAVEL INPUT TERMINALS OPERATION DESCRIPTION

Case 1: End Of Operation signal is driven from a normally opened switch.
ETNO1 & ETNO2 should be connected to a contact that closes when lift completes the evacuation.
ETNC1 & ETNC2 should remain unconnected.

Case 2: End Of Operation signal is driven from a normally closed switch.
ETNO1 & ETNO2 should be shunted.
ETNC1 & ETNC2 should be connected to a contact that opens when lift completes the evacuation.

ERD OPERATION IN PROGRESS OUTPUT TERMINALS DESCRIPTION

OIP1 & OIP2 close when ERD starts operation and remain closed until the lift completes the evacuation.

Title: RESCUE PANEL: 3PHASES IN/ 3PHASES OUT		
Size: B	Number:	Revision:
Date: 9/20/2024	Sheet 11 of 11	
File: Y:\Elevators\..\RescuePanel3PhIn_3PhOut.SchDoc	Drawn By:	