

DRAWING LIST

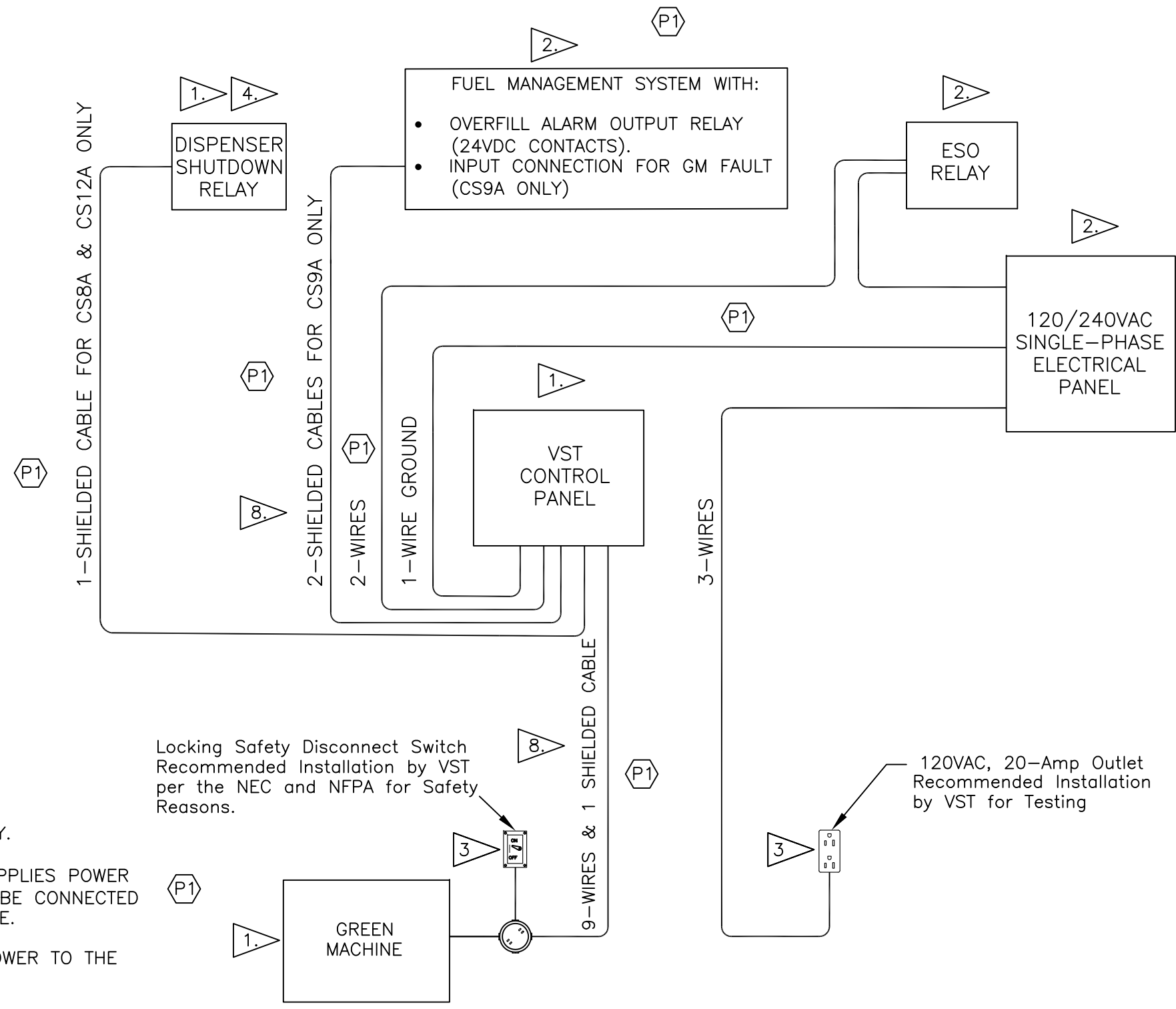
SHT	DESCRIPTION
1	TITLE SHEET.
2	ELECTRICAL OVERVIEW – ESO RELAY WIRING.
3	CONTROL PANEL FIELD WIRING – ESO RELAY WIRING.
4	CONTROL PANEL FIELD WIRING – COMPONENT CONNECTIONS.
5	DISPENSER SHUTDOWN RELAY CIRCUIT COMPONENTS.
6	DISPENSER SHUTDOWN RELAY CIRCUIT WIRING DIAGRAM.
7	GREEN MACHINE JUNCTION BOX FIELD WIRING DIAGRAM.
8	PRESSURE SENSOR WIRING DIAGRAM.
9	VACUUM PUMP MOTOR WIRING DIAGRAM.
10	WIRING CONNECTIONS.

P1

THESE INSTALLATION DRAWINGS,
 APPLY TO ALL 5790-001
 PANELS, REV J AND EARLIER

ECN	DESCRIPTION	RELEASED
2582	PER EC	11/12/24

DRAWN BY P. ELAM CHECKED BY R. GRANTHAM APPROVED BY G. WALKER	DATE 10/31/24 DATE 10/31/24 DATE 10/31/24	TITLE INSTALLATION DRAWING GREEN MACHINE – GEN 3  Vapor Systems Technologies, Inc. Springboro, Ohio 45066 www.vstthose.com	DWG NO. 5790-002	REV P1	SHEET NO. 1 OF 10
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NOTES:

- 1. ITEM(S) ARE SUPPLIED BY VST, INC.
- 2. ITEM(S) ARE EXISTING AT GDF SITE LOCATION.
- 3. ITEM(S) ARE SUPPLIED BY CONTRACTOR.
- 4. ITEM IS FOR CS8A AND CS12A GREEN MACHINES ONLY.
- 5. THE STATION EMERGENCY SHUT-OFF (ESO) RELAY SUPPLIES POWER TO THE VST CONTROL PANEL 3-WIRES). GROUND TO BE CONNECTED AT MAIN PANEL TO MINIMIZE ELECTRICAL INTERFERENCE.
- 6. THE ESO RELAY, WHEN ACTIVATED, WILL TURN OFF POWER TO THE VST CONTROL PANEL.
- 7. THE OVERFILL OUTPUT RELAY WILL TURN OFF THE GREEN MACHINE WHEN AN OVERFILL OCCURS (2-WIRES).
- 8. THE SHIELDED CABLE IS A BELDEN 88760 (OR EQUIVALENT) 18AWG STRANDED (19X30) TC CONDUCTORS, PLENUM, FEP INSULATION, TWISTED PAIR, OVERALL BELDFOIL SHIELD (100% COVERAGE), 20AWG STRANDED TC DRAIN WIRE, FEP JACKET.

Locking Safety Disconnect Switch Recommended Installation by VST per the NEC and NFPA for Safety Reasons.

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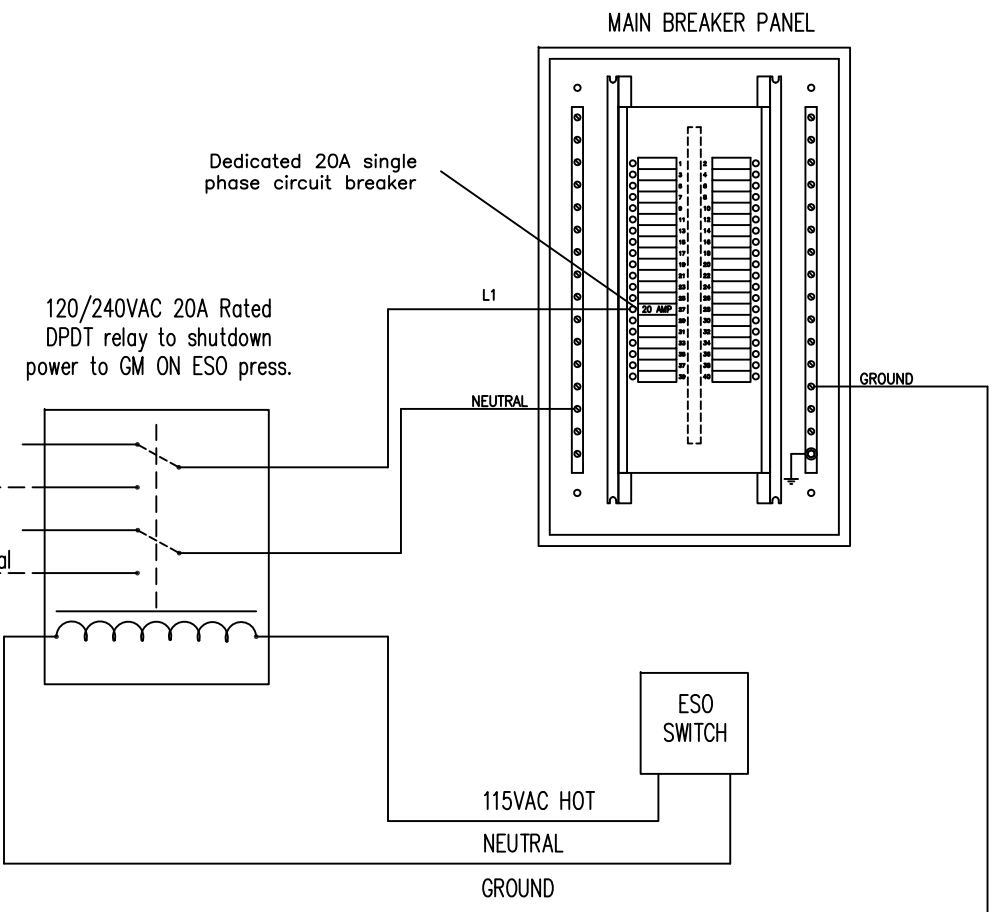
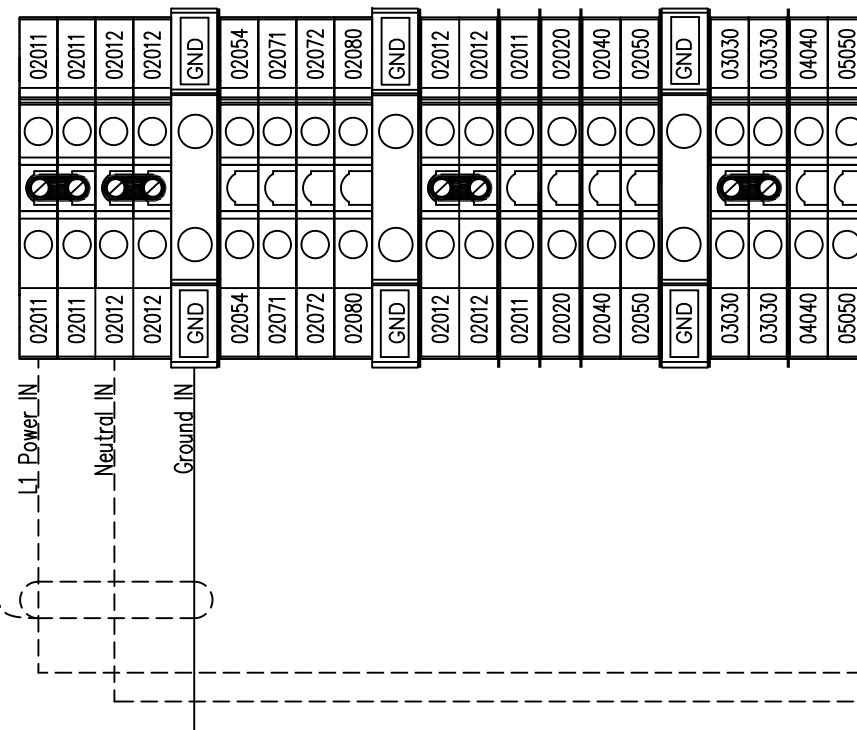
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DWG NO. 5790-002
REV P1

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BOTTOM OF PANEL FOR
FIELD WIRING CONNECTIONS

FIELD WIRING FROM THE MAIN
ELECTRICAL DISTRIBUTION PANEL TO THE
CONTROL PANEL TERMINAL BLOCKS


INCOMING POWER CONNECTIONS



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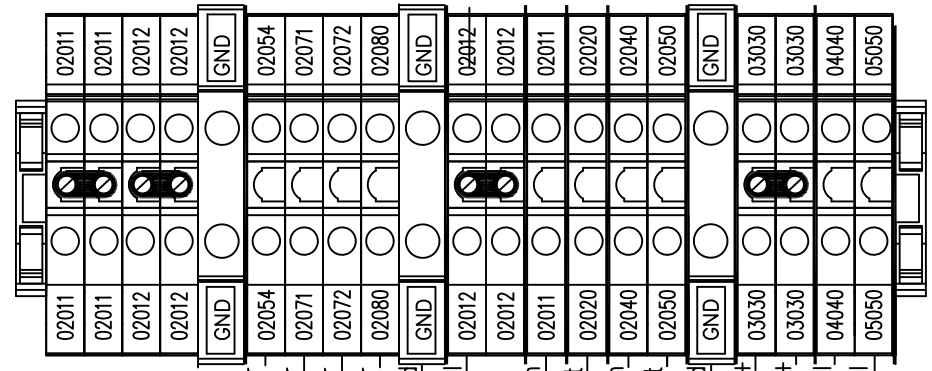
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 3RD ANGLE PROJECTION	THE INFORMATION ON THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. IT MAY BE USED ONLY FOR THE PURPOSE FOR WHICH VAPOR SYSTEMS TECHNOLOGIES, INC. PROVIDED IT.	SHEET NO. 3 OF 10
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CONTROL PANEL CONNECTIONS

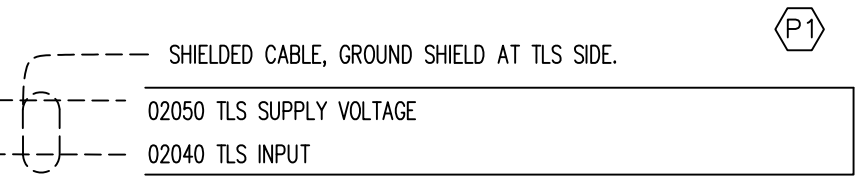
CONNECTING



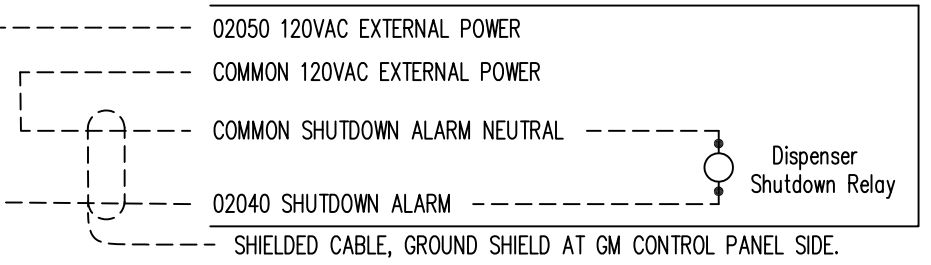
- * GREEN MACHINE INTERNAL JUNCTION BOX
- * PRESSURE SENSOR
- * SAFETY DISCONNECT SWITCH
- * OVERFILL ALARM RELAY
- * 72-HOUR STATION SHUTDOWN ALARM RELAY
- * GM FAULT

INSIDE THE DATA HUT FIELD WIRING CONNECTIONS

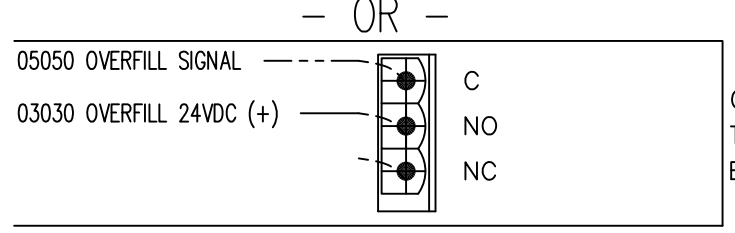
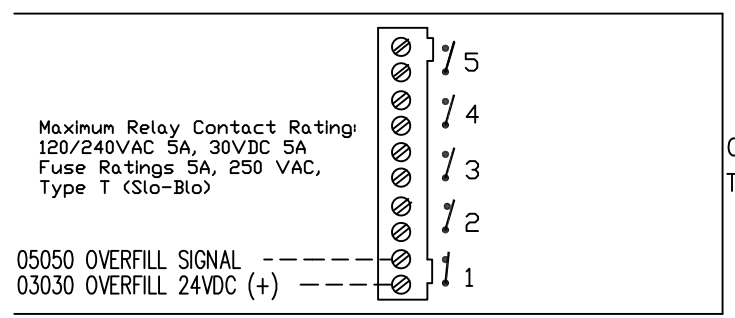
GM FAULT WIRING CONNECTIONS FOR TLS (CS9A ONLY)



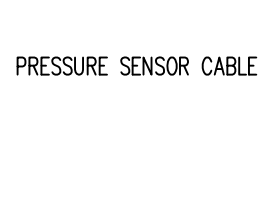
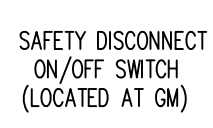
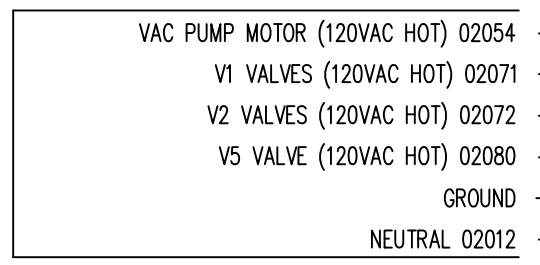
DISPENSER SHUTDOWN RELAY WIRING (CS8A & CS12A ONLY)



OVERFILL FIELD WIRING CONNECTIONS



AT THE GREEN MACHINE FIELD WIRING CONNECTIONS



P1

P1

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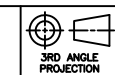
TITLE
**INSTALLATION DRAWING
GREEN MACHINE - GEN 3**

DWG NO. 5790-002	REV P1
SHEET NO. 4 OF 10	

ECN	DESCRIPTION	RELEASED
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Springboro, Ohio 45066 www.vstho.com



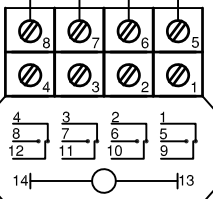
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FILENAME: 5790-002 TITLE: GREEN MACHINE - GEN 3 SCALE: N/A

120VAC, 10AMP, 4PDT,
WITH GREEN LED WHEN
ENERGIZED MINIATURE
PLUG-IN SQUARE-D
8501RS44P14V20
BASE 8501NR34

TO SUBMERSIBLE
PUMP CONTROLLERS
CIRCUITS

A1 A2 A3 A4



N.O.
RELAY
(R9)

B1 B2 B3 B4

TO SUBMERSIBLE
PUMP CONTROLLERS
CIRCUITS

120VAC
EXTERNAL
POWER

02040

TO VST CONTROL
PANEL FIELD WIRING
TERMINAL BLOCKS

See Sheet 6 of
12 for wiring
details.

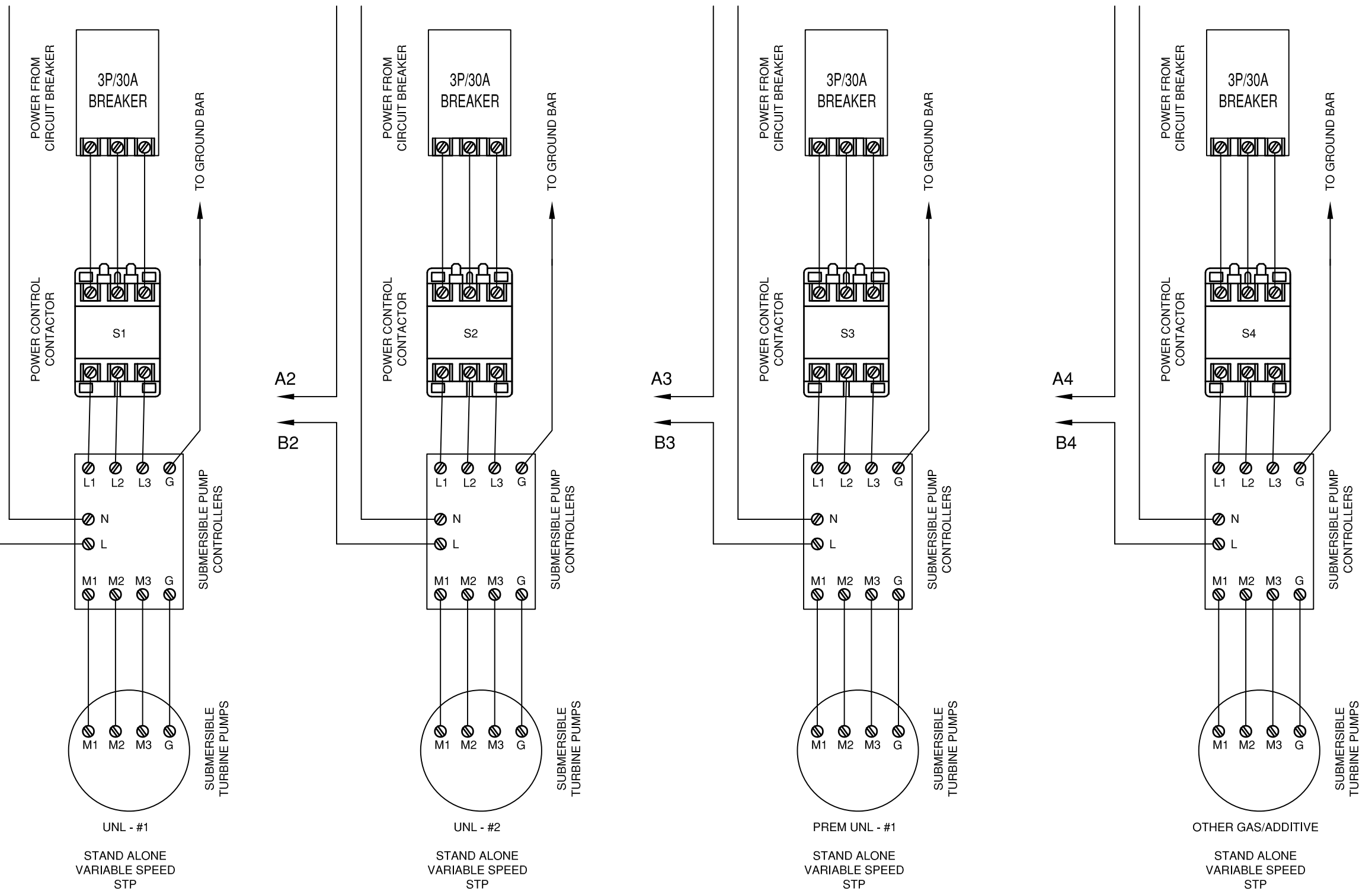
02050

1 DISPENSER SHUTDOWN RELAY

NOTES:

1. ITEM IS FOR CS8A and CS12A GREEN MACHINES ONLY.

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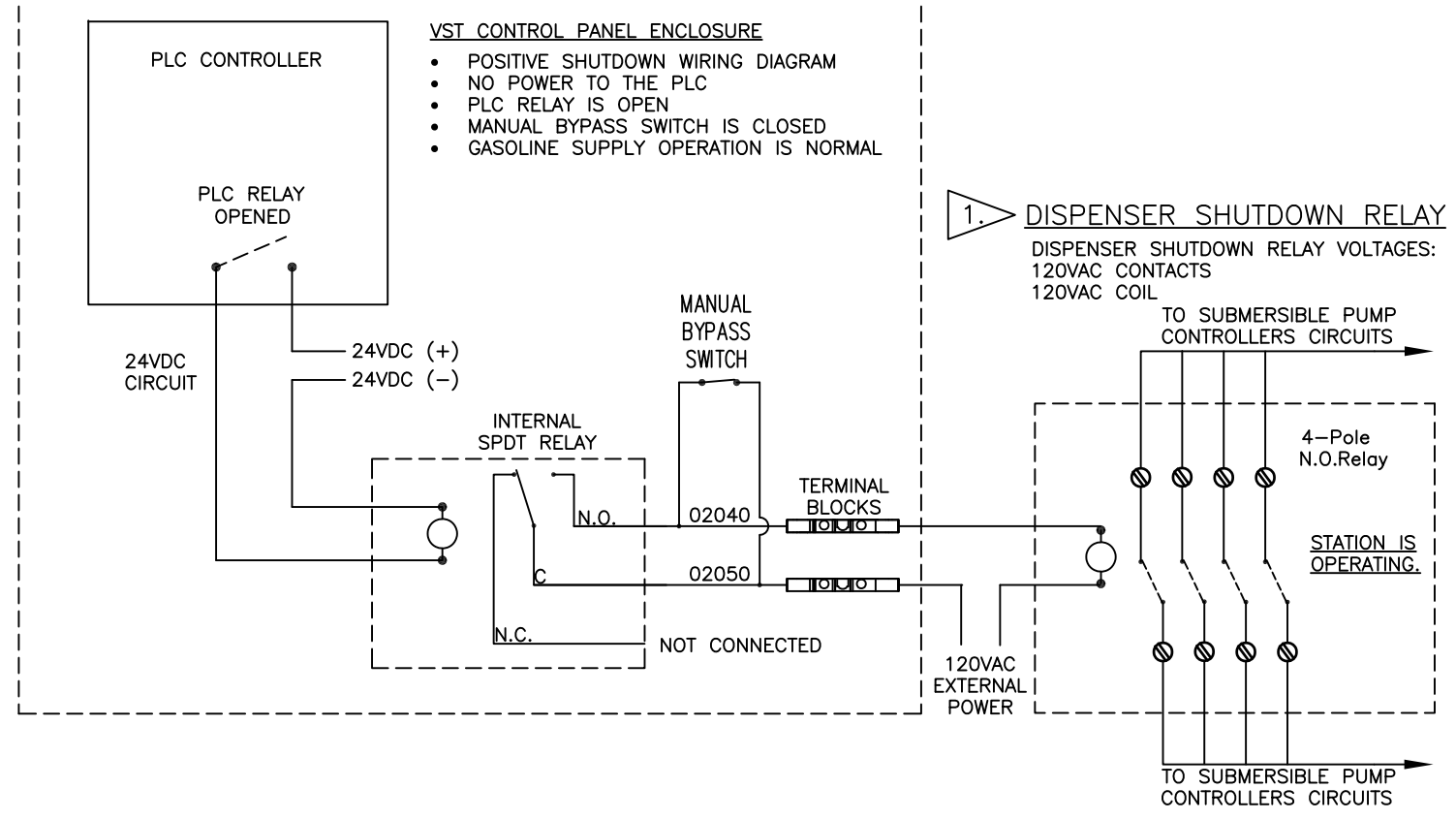
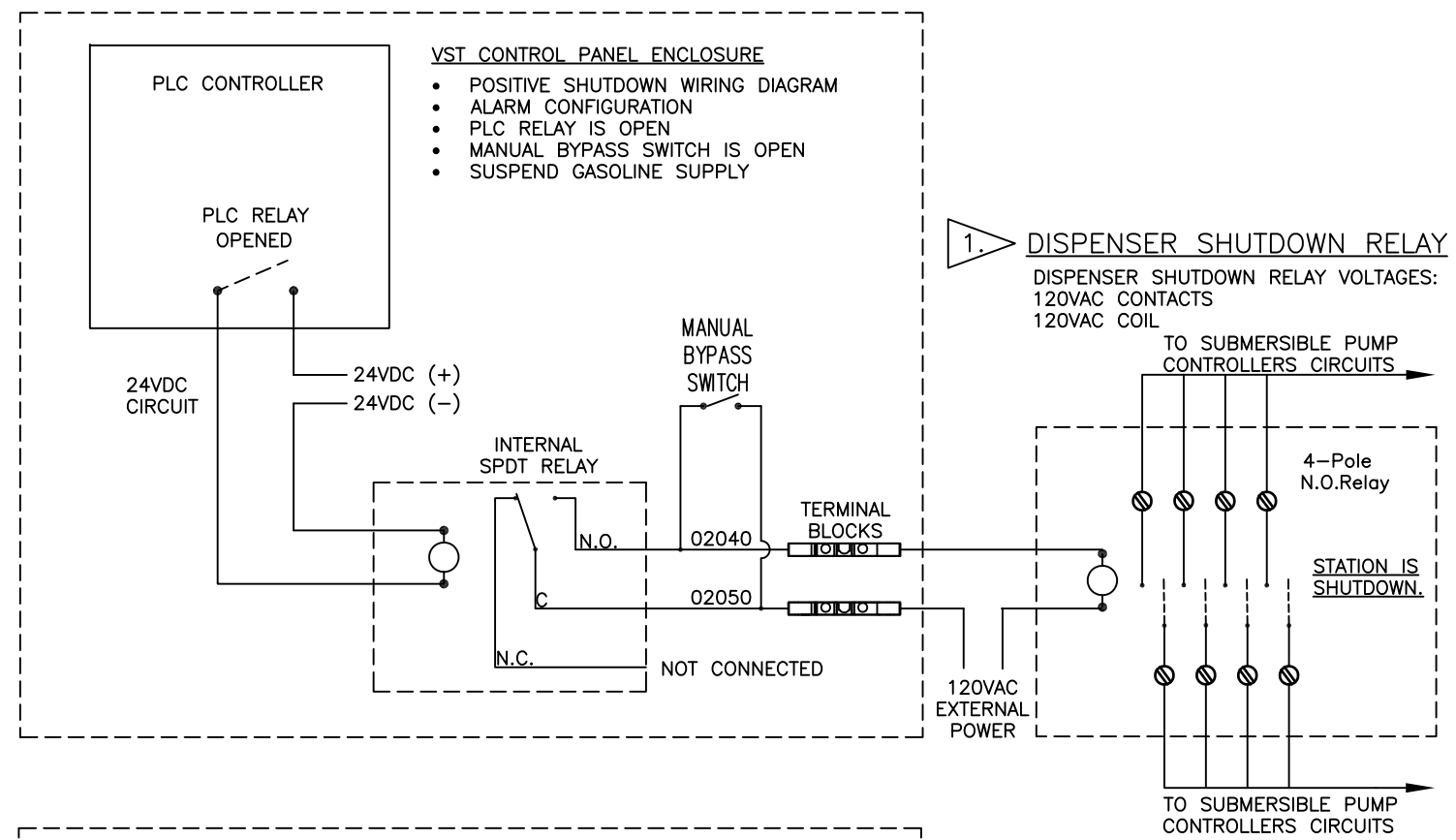
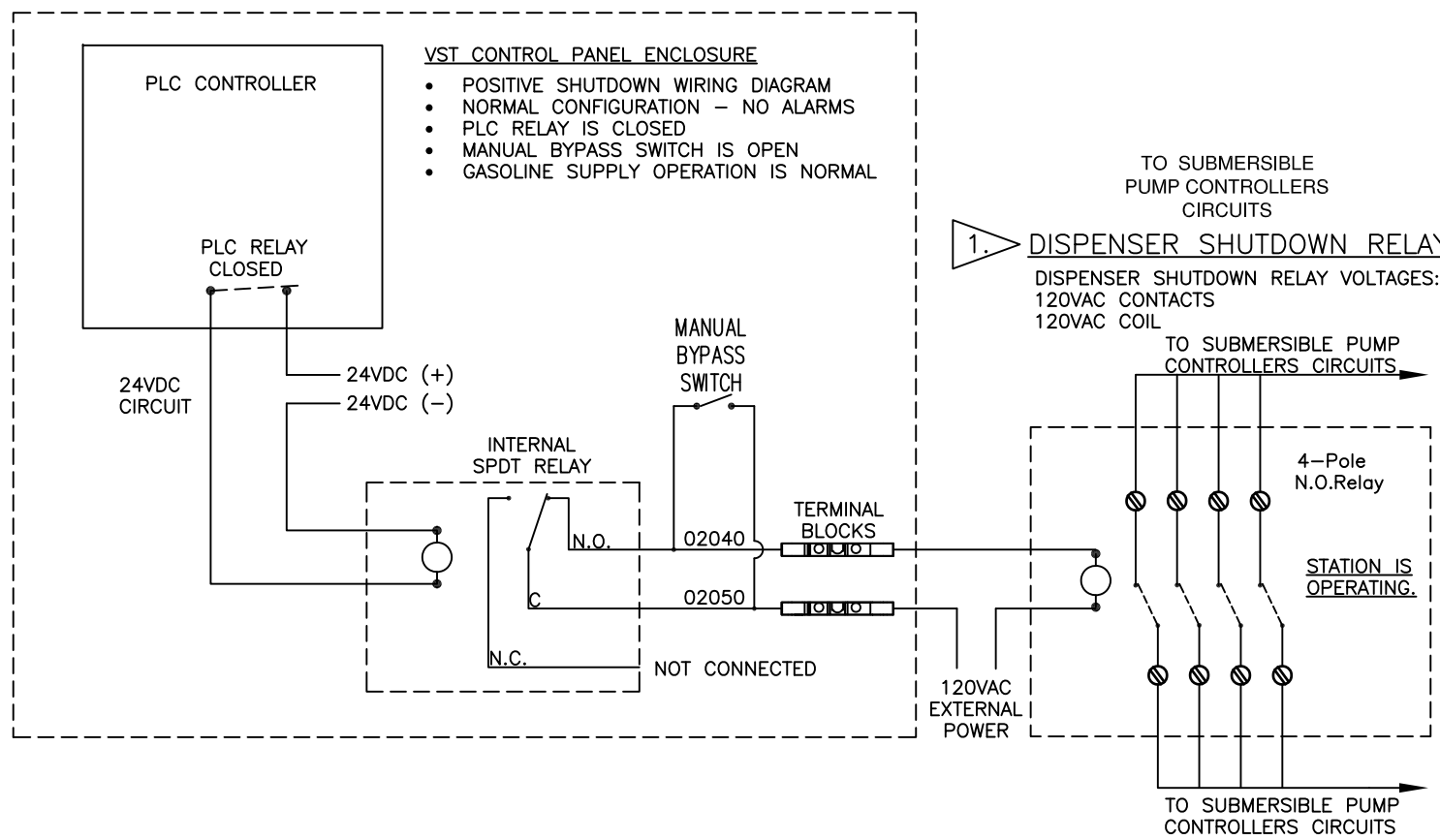


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SHEET NO. 5 OF 10	

FILENAME: 5790-002 TITLE: GREEN MACHINE - GEN 3 SCALE: N/A



Positive shutdown wiring diagram. Turning OFF power to the VST Control Panel will disable fueling. Splice into the dispenser shutoff signal after all other wiring to the vst control panel is complete and is fully functional. test the dispenser shutoff relay control before connecting dispenser shutoff wires to the dispenser shutoff relay.

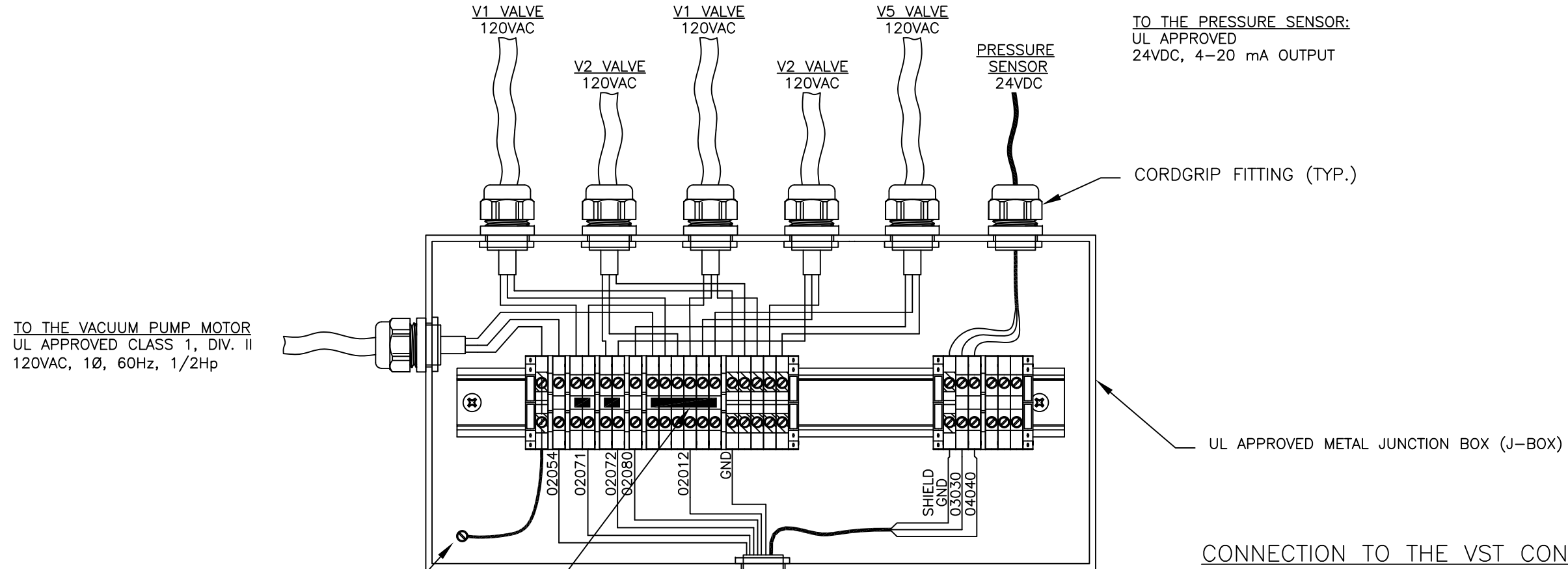
if the VST Control Panel loses power, the bypass switch can closed to keep the station operational.

NOTES:
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FILENAME: 5790-002 TITLE: GREEN MACHINE – GEN 3 SCALE: N/A



TO THE VACUUM PUMP MOTOR
UL APPROVED CLASS 1, DIV. II
120VAC, 1Ø, 60Hz, 1/2Hp

TO THE PRESSURE SENSOR:
UL APPROVED
24VDC, 4-20 mA OUTPUT

CORDGRIP FITTING (TYP.)

UL APPROVED METAL JUNCTION BOX (J-BOX)

EQUIPMENT GROUND

TERMINAL BLOCK
JUMPER (TYP.)

3/4" LIQUIDTIGHT CONDUIT FROM THE 3/4" CONDUIT
FITTING ON THE GREEN MACHINE INLET CONNECTION

CONNECTION TO THE VST CONTROL PANEL

- 02054 VACUUM PUMP MOTOR POWER (L1)
- 02071 V1 CONTROL VALVES POWER (L2)
- 02072 V2 CONTROL VALVES POWER (L3)
- 02080 V5 CONTROL VALVE POWER (L4)
- 02012 NEUTRAL
- GND GROUND

PRESSURE SENSOR CABLE:

- 03030 SHIELD GROUND
- 24VDC (+)
- 04040 4-20 mA SIGNAL (IN)

2. 2 CONDUCTOR, 18AWG, TWISTED PAIR, SHIELDED.
(SEE THE INSTALLATION MANUAL FOR DETAILS)

NOTES:

1. ALL CONNECTING WIRES AND THE PS SENSOR CABLE ARE PROVIDED BY THE CONTRACTOR.
2. BELDEN 88760 (OR EQUIVALENT).
3. SEE THE GREEN MACHINE INSTALLATION AND MAINTENANCE MANUAL FOR DETAILS.
4. ALL FIELD WIRING MUST MEET THE NEC AND NFPA CODE REQUIREMENTS.
5. GROUND SHIELD DRAIN WIRE AT GM CONTROL PANEL.

P1

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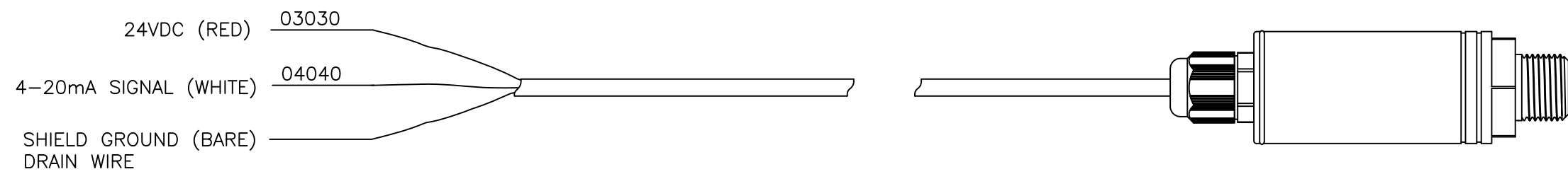
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Springboro, Ohio 45066 www.vsthoose.com



SCALE: N/A
TITLE: GREEN MACHINE - GEN 3
FILENAME: 5790-002

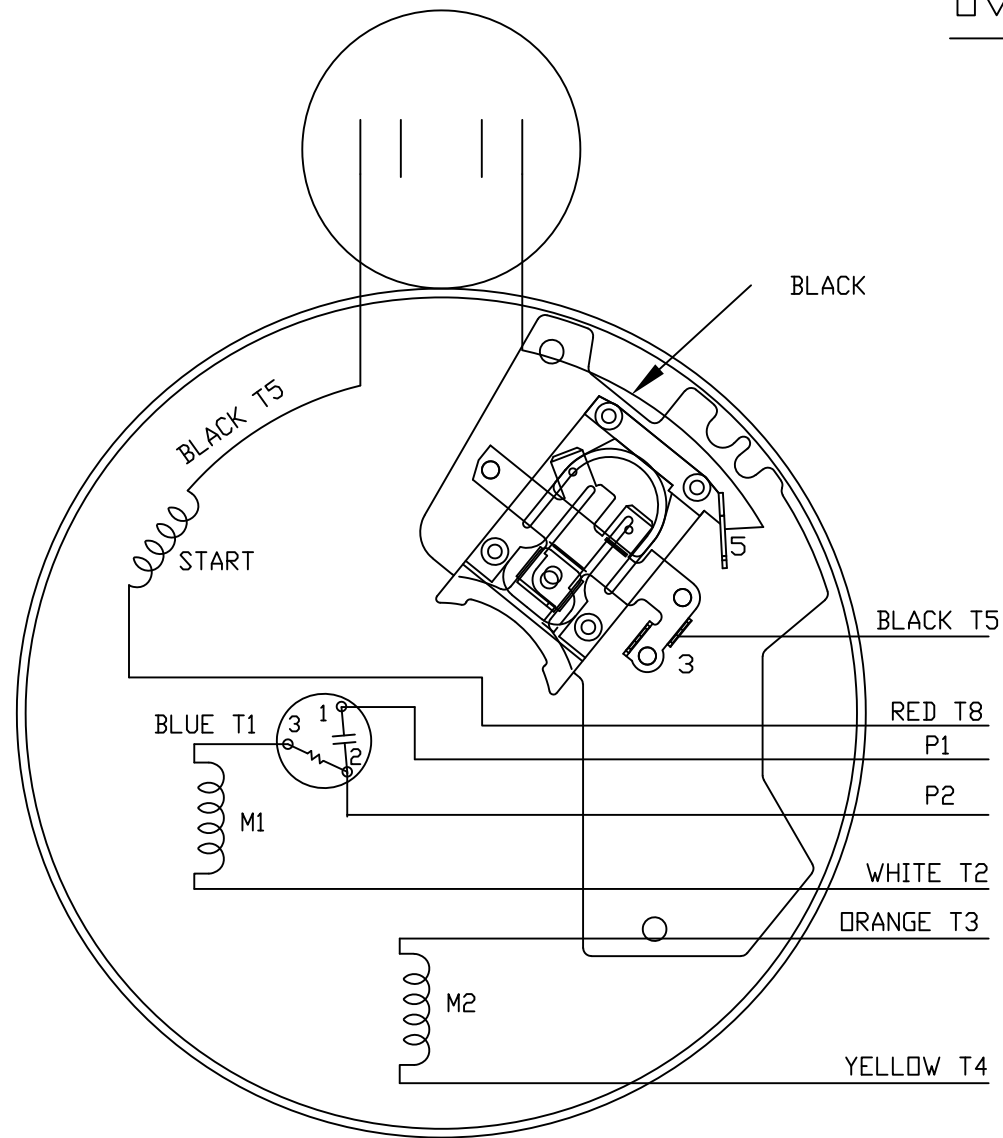


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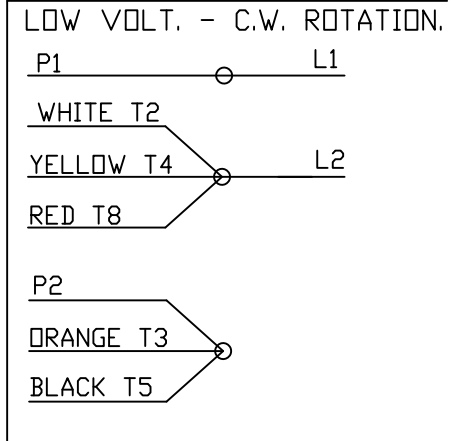
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THERMALLY PROTECTED

DUAL VOLTAGE
CAPACITOR START
OVERLOAD SELECT ROT.



NORMAL ROTATION FOR GM IS C.W.



CAUTION:
FOR GREEN MACHINE WIRING MOTOR
REPLACEMENT.

				TOLERANCES UNLESS SPECIFIED		ELECTRIC MOTORS GEARMOTORS AND DRIVES	DRAWN
				DEC.	INCHES		CHK
			.X	±.1			APPD
			.XX	±.02			SCALE 5=8
			.XXX	±.005			REF
			.XXXX	±.0005		MAT'L.	FMF
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"	FINISH	PREV
			RFP			CAD FILE	SIZE
			DIST				DRAWING NO. PAGE OF REV.
							A 1 1

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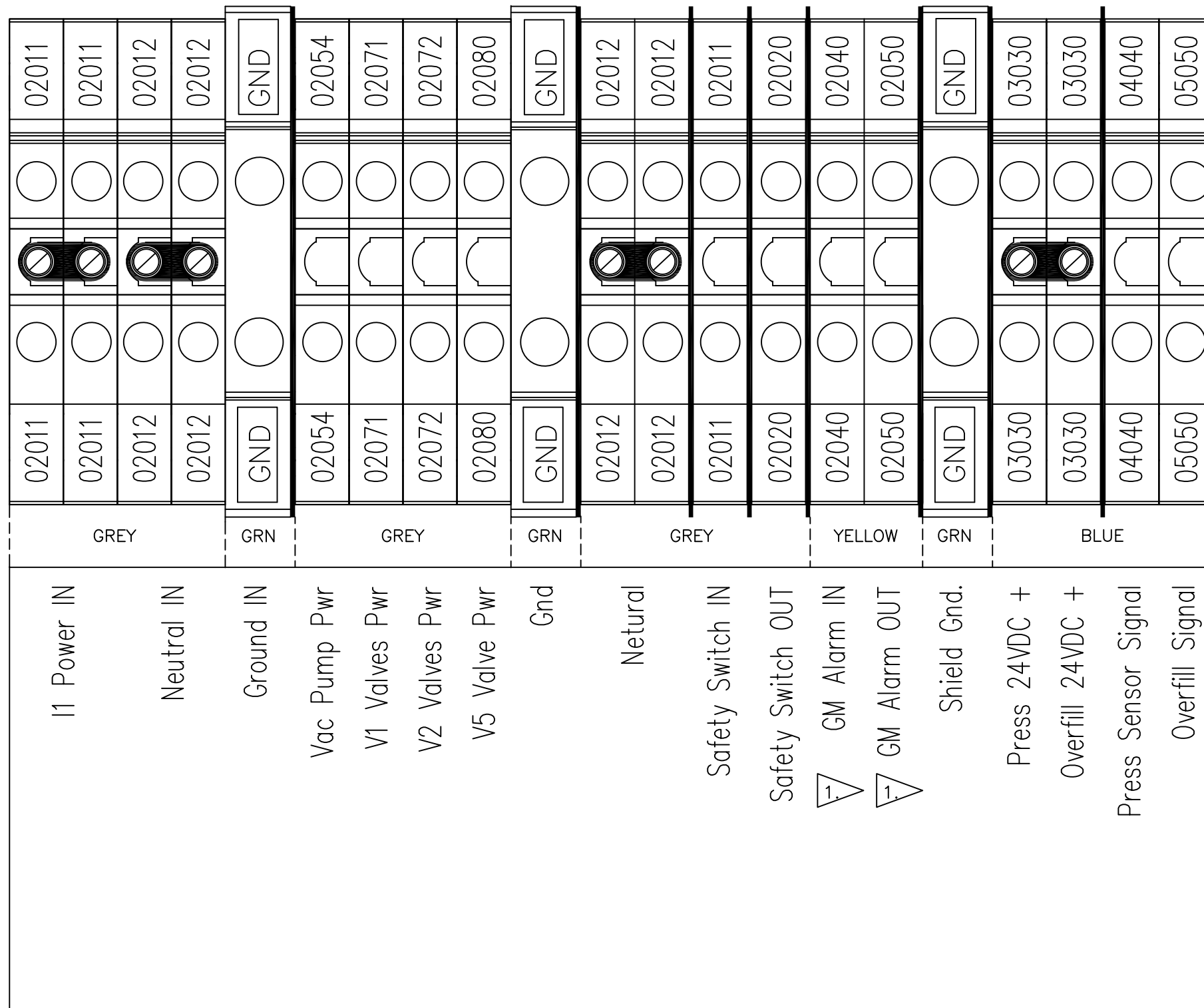
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FILENAME: 5790-002 TITLE: GREEN MACHINE - GEN 3 SCALE: N/A

CONTROL PANEL WIRING CONNECTIONS



FIELD WIRING CONNECTIONS

NOTES:

1. ITEM IS FOR CS8A, CS9A AND CS12A GREEN MACHINES ONLY.



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