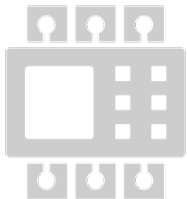




AMCOL CORPORATION

3063-HMA2 BILLET SPRAYER WITH OVERSPRAY CONTAINMENT

Electrical Schematics



Contents

Drawing Information.....	1
Incoming Power and Power Supplies	2
PLC.....	3
LCD & Flowmeter Controller.....	4
Servo Motor and Reed Switches.....	5
Terminal Layout	6
Layout.....	7
Wire Connections	8
Wire Connections (Cont.) & Cable Connections	9
Cable Connections Table.....	9
Electrical Component BOM	10

Drawing Information

Wire Color Abbreviations

BK = Black

BL = Blue

BR = Brown

GN = Green

GY = Gray

OR = Orange

PR = Purple

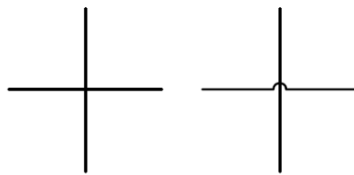
RD = Red

WH = White

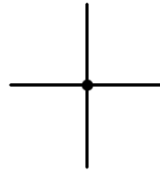
YL = Yellow

PK = Pink

Wire Connections



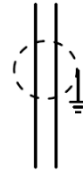
Not Connected



Connected



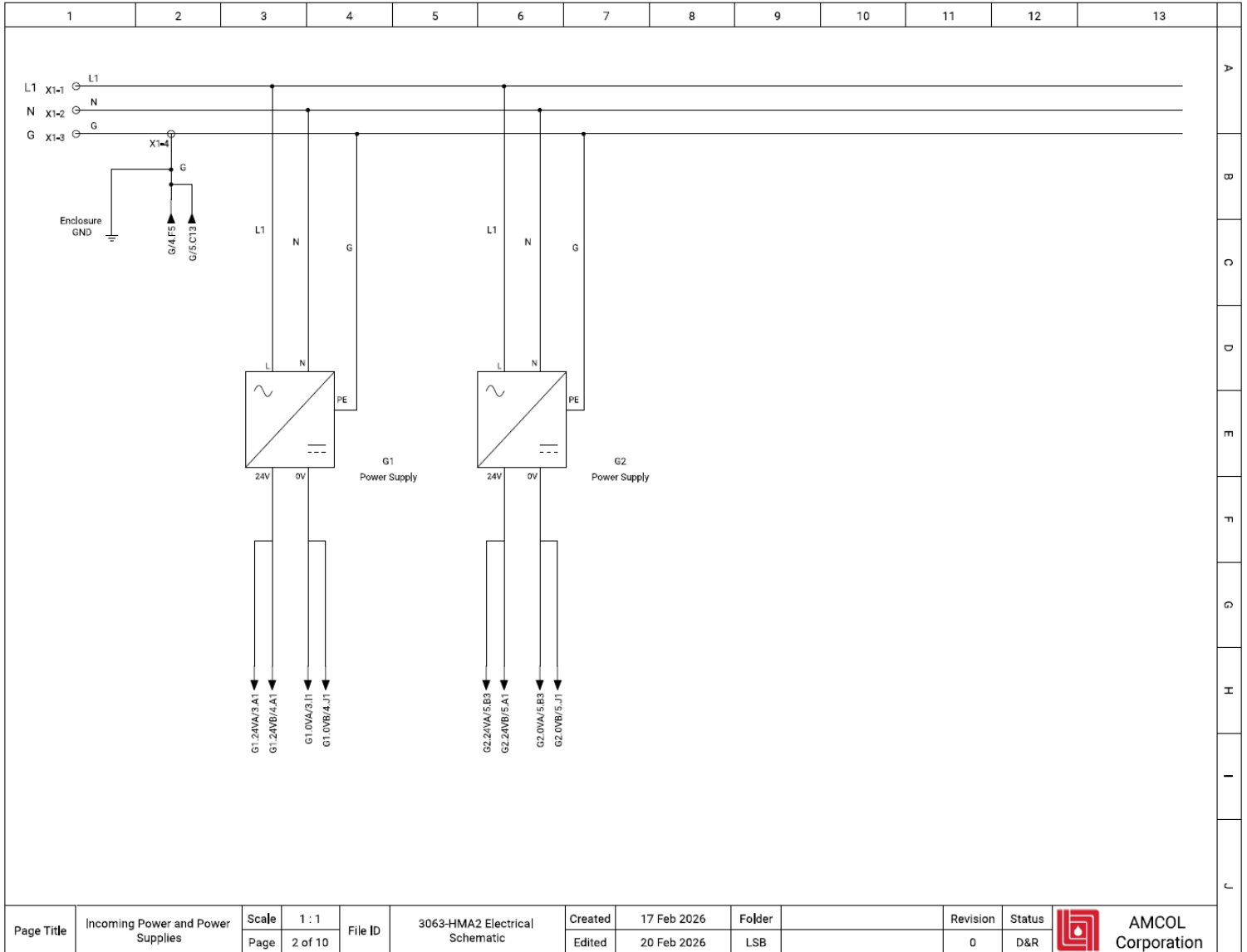
Earth/Ground



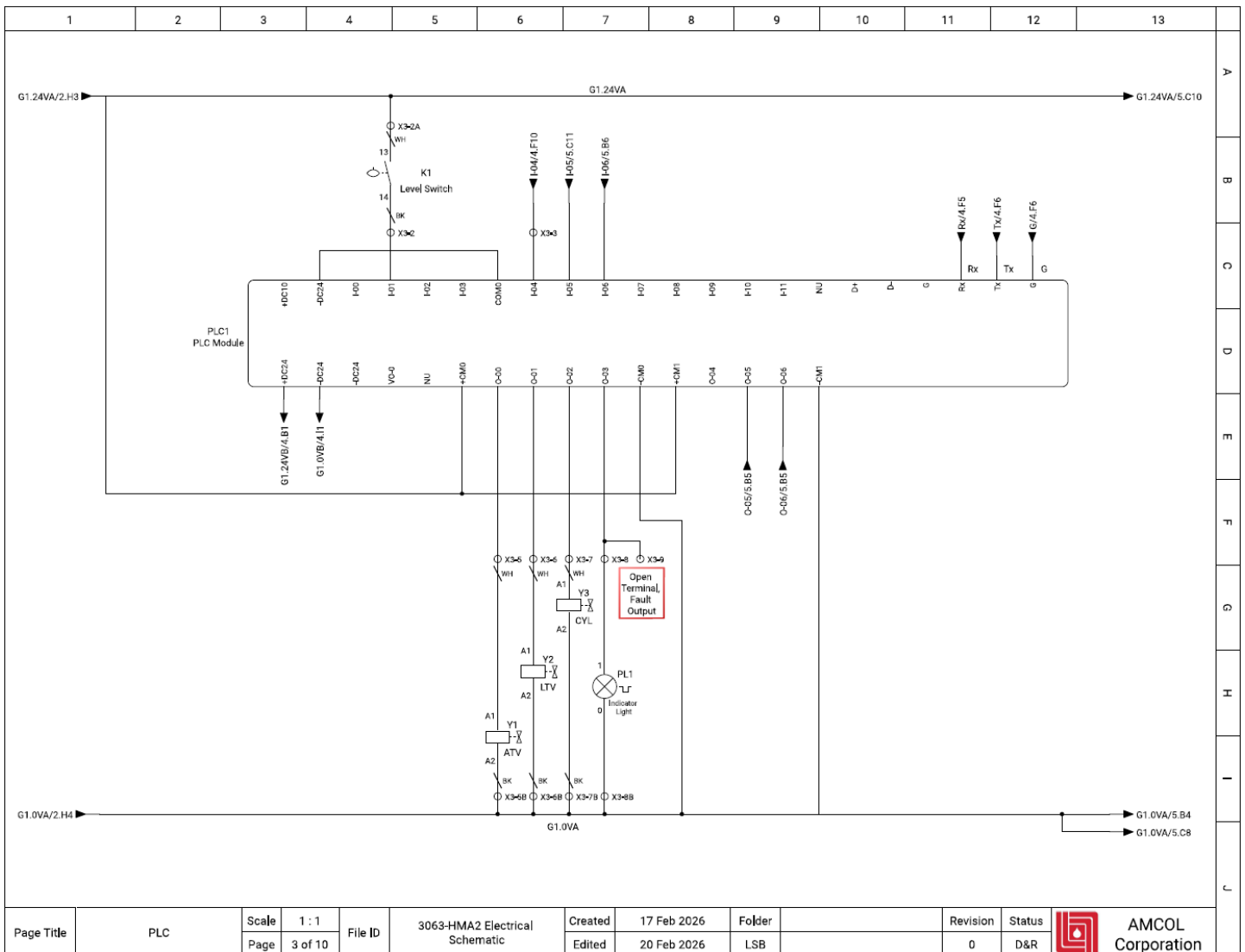
Shielded Wires



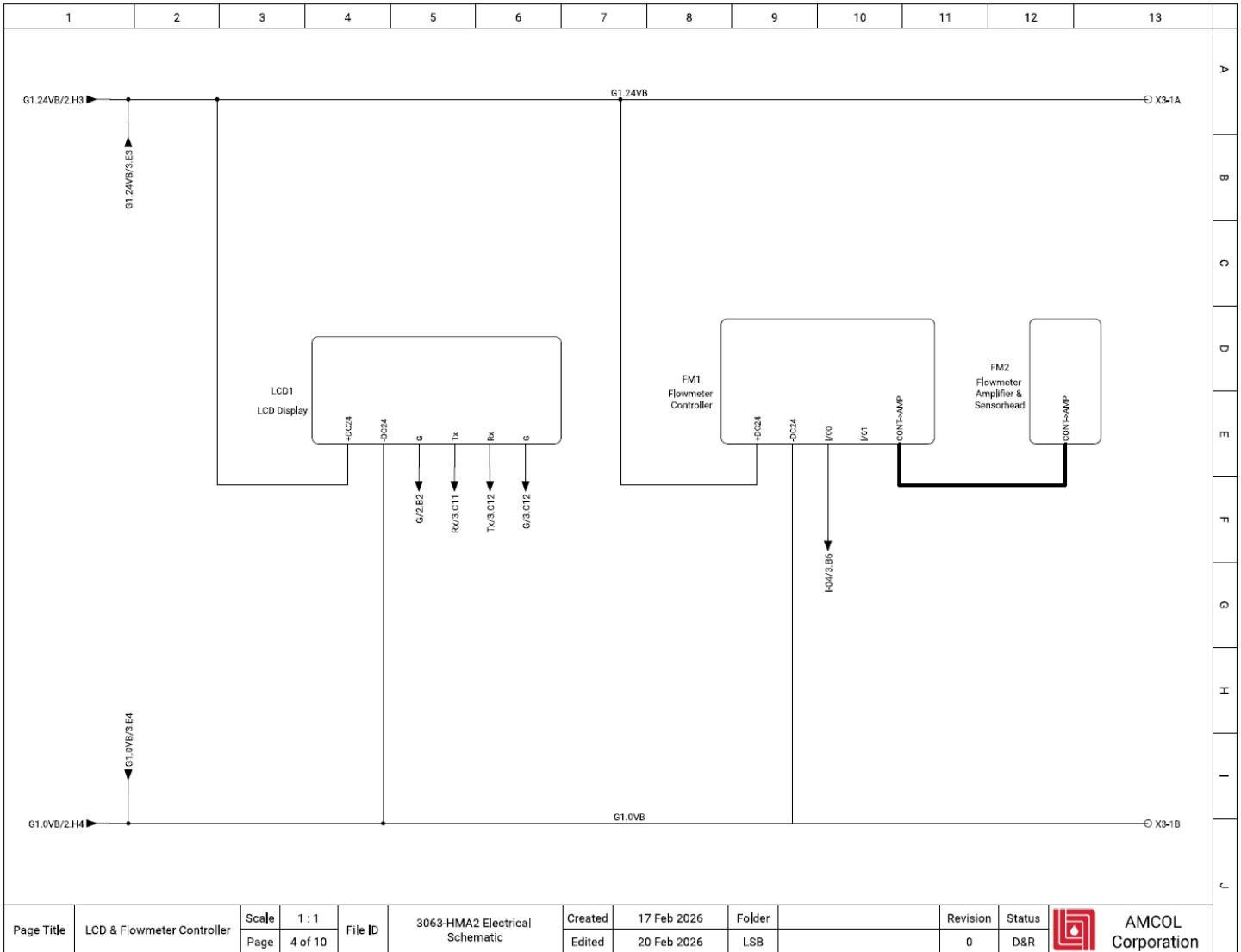
Incoming Power and Power Supplies



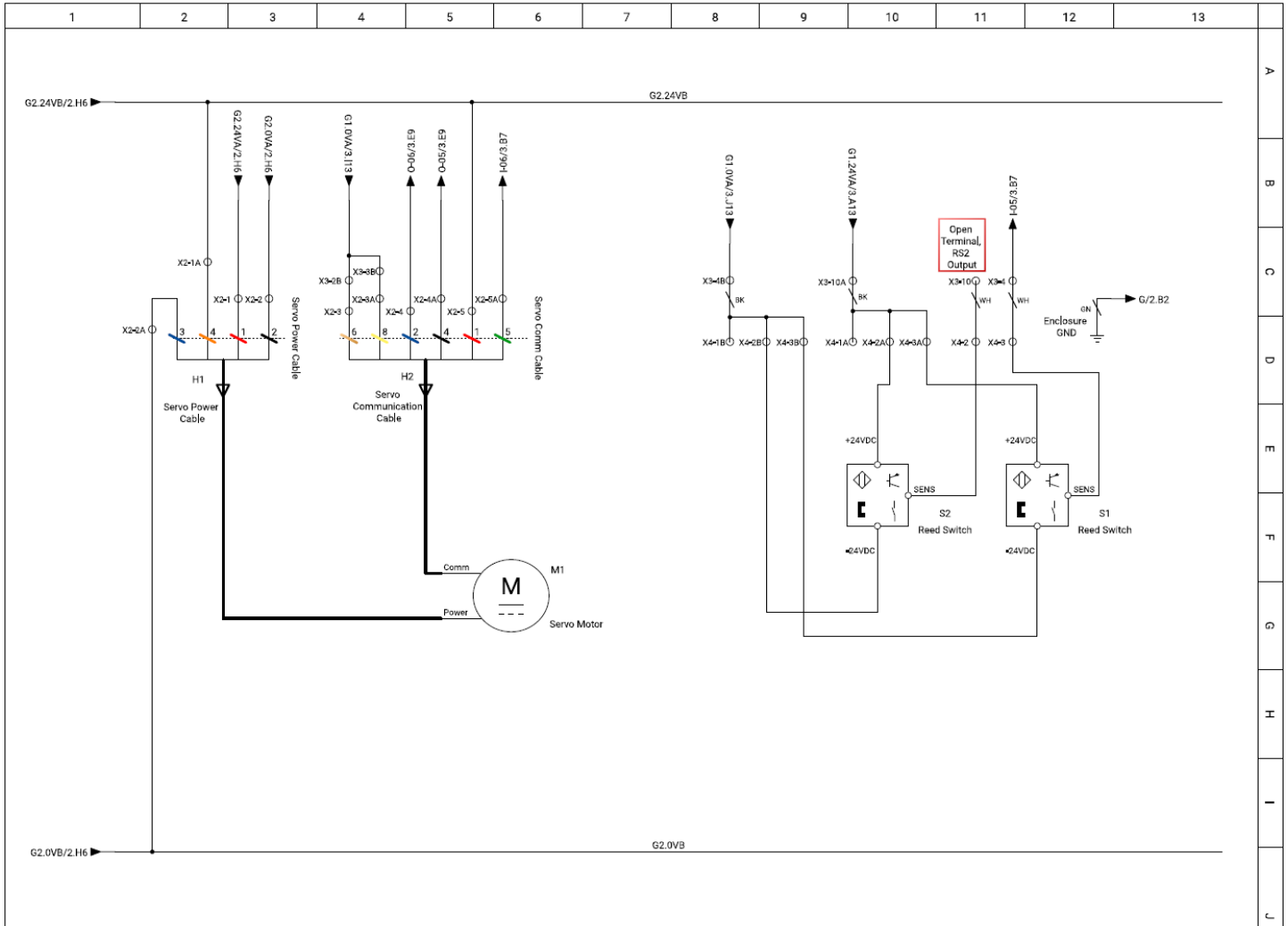
PLC




LCD & Flowmeter Controller

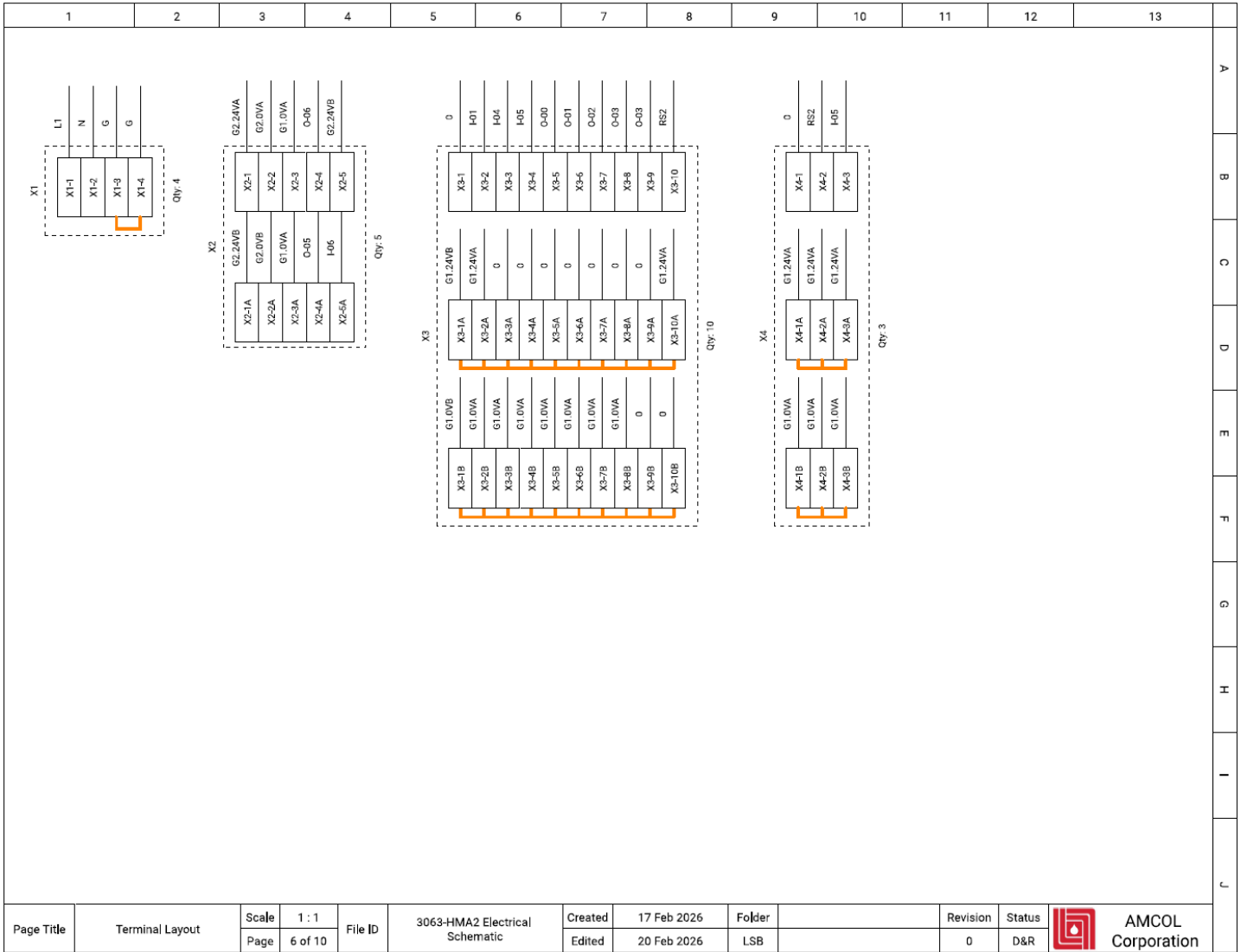


Servo Motor and Reed Switches

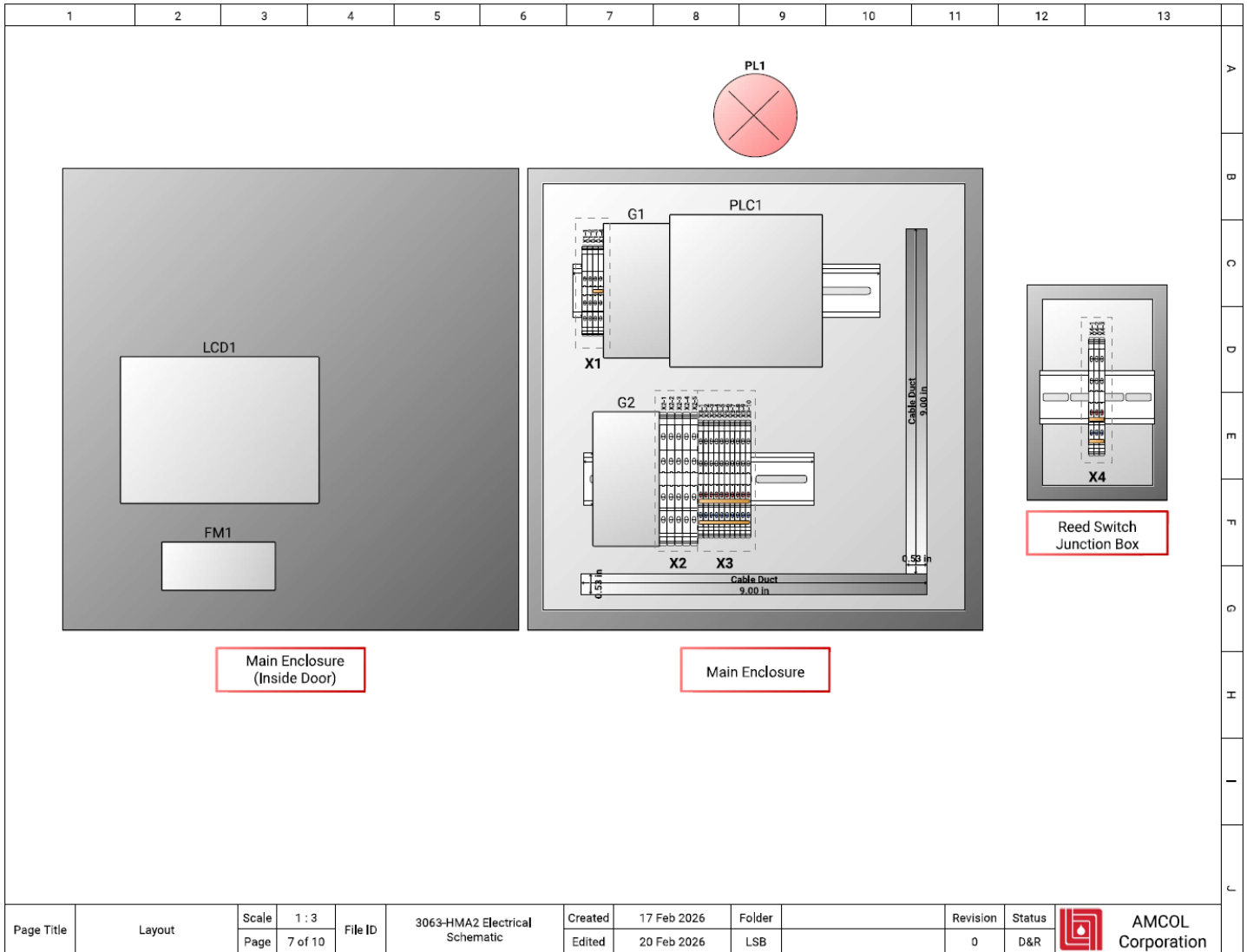


Page Title	Servo Motor and Reed Switches	Scale	1 : 1	File ID	3063-HMA2 Electrical Schematic	Created	17 Feb 2026	Folder		Revision	0	Status	D&R	 AMCOL Corporation
		Page	5 of 10			Edited	20 Feb 2026	LSB						

Terminal Layout



Layout



Page Title	Layout	Scale	1 : 3	File ID	3063-HMA2 Electrical Schematic	Created	17 Feb 2026	Folder		Revision	Status	
		Page	7 of 10			Edited	20 Feb 2026	LSB		0	D&R	

Wire Connections

Wire	Location	Cable	Gauge	Core No.	CoreName	Core Color	Reference	Location	Pin Name	Reference	Location	Pin Name
FM CBL	/4.E11	FM CBL		1	1		FM1	/4.D10	CONT->AMP	FM2	/4.D12	CONT->AMP
G	/2.B1						X1-3	/2.B1		X1-4	/2.B2	PE
G	/2.B6						X1-4	/2.B2		G1	/2.E3	G
G	/2.B2						X1-4	/2.B2		LCD1	/4.D5	PE
G	/2.C4						G1	/2.E3	PE	G2	/2.E6	PE
G	/3.C12						PLC1	/3.D8	G	LCD1	/4.D5	G
G1.DVA	/2.04						G1	/2.E3	0V	PLC1	/3.D8	-CM0
G1.DVA	/3.08						PLC1	/3.D8	-CM0	X3-5B	/3.16	-CM1
G1.DVA	/3.08									PLC1	/3.D8	
G1.DVA	/3.H7	2C.CYL	18	2	2	BK	Y3	/3.G7	A2	X3-7B	/3.17	
G1.DVA	/3.16	2C.LTV	18	2	2	BK	Y2	/3.H6	A2	X3-6B	/3.16	
G1.DVA	/3.17						PL1	/3.H7	0	X3-8B	/3.17	
G1.DVA	/3.16	2C.ATV	18	2	2	BK	Y1	/3.16	A2	X3-5B	/3.16	
G1.DVA	/3.16						X3-5B	/3.16		X3-6B	/3.16	
G1.DVA	/3.16						X3-6B	/3.16		X3-7B	/3.17	
G1.DVA	/3.17						X3-7B	/3.17		X3-8B	/3.17	
G1.DVA	/3.17						X3-8B	/3.17		X3-3B	/5.C4	
G1.DVA	/5.04						X3-2B	/5.C4		X3-4B	/5.C8	
G1.DVA	/5.04						X3-3B	/5.C4		X3-2B	/5.C4	
G1.DVA	/5.04						X3-3B	/5.C4		X2-3A	/5.C4	
G1.DVA	/5.04						X3-2B	/5.C4		X2-3	/5.C4	
G1.DVA	/5.08	3C.RS1	18	2	2	BK	X3-4B	/5.C9		X4-1B	/5.D8	
G1.DVA	/5.04	Servo Comm Cable	22	8	8	OR	X2-3A	/5.C4		H2	/5.D5	2
G1.DVA	/5.08						X4-2B	/5.D9		X4-3B	/5.D9	
G1.DVA	/5.04	Servo Comm Cable	22	6	6	YL	X2-3	/5.C4		H2	/5.D5	2
G1.DVA	/5.E9						X4-2B	/5.D9		S2	/5.A1	-24VDC
G1.DVA	/5.E10						X4-3B	/5.D9		S1	/5.A1	-24VDC
G1.OVB	/2.04						G1	/2.E3	0V	PLC1	/3.D8	-DC24
G1.OVB	/3.D4						PLC1	/3.D8	-DC24	LCD1	/4.D5	-DC24
G1.OVB	/4.04						LCD1	/4.D5	-DC24	FM1	/4.D10	-DC24
G1.OVB	/4.09						FM1	/4.D10	-DC24	X3-1B	/4.113	
G1.24VA	/2.03						G1	/2.E3	24V	X3-2A	/3.A4	
G1.24VA	/3.A4						X3-2A	/3.A4		X3-10A	/5.C10	
G1.24VA	/3.A4	2C.LL	18	1	1	WH	X3-2A	/3.A4		K1	/3.B4	13
G1.24VA	/3.C3						PLC1	/3.D8	+CM0	PLC1	/3.D8	+CM1
G1.24VA	/5.C10	2C.RS2	18	2	2	BK	X3-10A	/5.C10		X4-1A	/5.D10	
G1.24VA	/5.D10						X4-2A	/5.D10		X4-3A	/5.D10	
G1.24VA	/5.D10						X4-2A	/5.D10		S2	/5.A1	+24VDC
G1.24VA	/5.D11						X4-3A	/5.D10		S1	/5.A1	+24VDC
G1.24VB	/2.03						G1	/2.E3	24V	PLC1	/3.D8	+DC24
G1.24VB	/3.D3						PLC1	/3.D8	+DC24	X3-1A	/4.113	+DC24
G1.24VB	/4.07						X3-1A	/4.113	+DC24	LCD1	/4.D5	+DC24
G1.24VB	/4.03						LCD1	/4.D5	+DC24	FM1	/4.D10	+DC24
G2.OVA	/2.06						G2	/2.E6	0V	X2-2	/5.C3	
G2.OVA	/5.D3	Servo Power Cable	18	2	2	BK	X2-2	/5.C3		H1	/5.D2	2
G2.OVB	/5.C2	Servo Power Cable	18	3	3	BL	X2-2A	/5.D2		H1	/5.D2	2
G2.OVB	/5.02						X2-2A	/5.D2		X2-2A	/5.D2	
G2.24VA	/5.C3									X2-1	/5.C3	
G2.24VA	/5.D3	Servo Power Cable	18	1	1	RD				H1	/5.D2	2
G2.24VB	/2.06						G2	/2.E6	24V	X2-1A	/5.C2	
G2.24VB	/5.B2						X2-1A	/5.C2		X2-5	/5.C5	
G2.24VB	/5.C2	Servo Power Cable	18	4	4	OR	X2-1A	/5.C2		H1	/5.D2	2
G2.24VB	/5.D5	Servo Comm Cable	22	1	1	GN	X2-5	/5.C5		H2	/5.D5	
H01	/3.B4	2C.LL	18	2	2	BK	K1	/3.B4	14	X3-2	/3.C4	I01
H01	/3.04						X3-2	/3.C4		PLC1	/3.D8	I00
H04	/3.B6						X3-3	/3.C6		FM1	/4.D10	I04
H04	/3.C6						X3-3	/3.C6		PLC1	/3.D8	
H05	/3.C7						PLC1	/3.D8	I-05	X3-4	/5.C11	
H05	/5.C11	3C.RS1	18	1	1	WH	X3-4	/5.C11		X4-3	/5.D11	SENS
H05	/5.E12						X4-3	/5.D11		S1	/5.A1	
H06	/3.C7						PLC1	/3.D8	I-06	X2-5A	/5.C6	
H06	/5.D5	Servo Comm Cable	22	5	5	RD	X2-5A	/5.C6		H2	/5.D5	2
L1	/2.A7						X1-1	/2.A1		G2	/2.E6	L
L1	/2.C3									G1	/2.E3	L
N	/2.A7						X1-2	/2.A1		G1	/2.E3	N
N	/2.04						G1	/2.E3	N	G2	/2.E6	N
O-00	/3.E6	2C.ATV	18	1	1	WH	PLC1	/3.D8	O-00	X3-5	/3.F6	A1
O-01	/3.E6						X3-5	/3.F6		Y1	/3.16	A1
O-01	/3.E6	2C.LTV	18	1	1	WH	PLC1	/3.D8	O-01	X3-6	/3.F6	A1
O-01	/3.E6						X3-6	/3.F6		Y2	/3.H6	A1

Wire Connections (Cont.) & Cable Connections

Wire	Location	Cable	Gauge	Core No.	CoreName	Core Color	Reference	Location	Pin Name	Reference	Location	Pin Name
O-02	/3.E7	2C.CYL		1	1	WH	PLC1	/3.D8	O-02	X3-7	/3.F7	
O-02	/3.G7						X3-7	/3.F7				
O-03	/3.E7						PLC1	/3.D8	O-03	X3-8	/3.F7	
O-03	/3.F7	Servo Comm Cable		4	4	BL	X3-9	/3.F7		PLC1	/3.D8	O-03
O-03	/3.G7						X3-8	/3.F7		PL1	/3.H7	1
O-05	/3.E9						PLC1	/3.D8	O-05	X2-4A	/5.C5	2
O-05	/5.D5	Servo Comm Cable		2	2	BK	X2-4A	/5.C5	O-06	X2-4	/5.C5	2
O-06	/3.E9						PLC1	/3.D8		H2	/5.D5	
O-06	/5.D5						X2-4	/5.C5		H2	/5.D5	
RS2	/5.C11	2C.RS2		1	1	WH	X3-10	/5.C11		X3-10	/5.C11	
RS2	/5.C11						X3-10	/5.C11		X4-2	/5.D11	
RS2	/5.E11						X4-2	/5.D11		S2	/5.A1	SENS
Rx	/3.C11	Servo Communication Cable					PLC1	/3.D8	Rx	LCD1	/4.D5	Tx
Servo Communication Cable	/5.F5						H2	/5.D5	1	M1	/5.G6	Comm
Servo Power Cable	/3.C12						H1	/5.D2	1	M1	/5.G6	Power
Tx	/3.C5						PLC1	/3.D8	Tx	LCD1	/4.D5	Rx
1							PLC1	/3.D8	-DC24	PLC1	/3.D8	COMO

Cable Connections Table

Cable	Core Name	Core Color	Core Type	Core Length	Wire	Location
Name: 2C.ATV Harness:	1 2	WH BK			O-00 G1.0VA	/3.G6 /3.I6
Name: 2C.CYL Harness:	1 2	WH BK			O-02 G1.0VA	/3.G7 /3.H7
Name: 2C.LL Harness:	1 2	WH BK			G1.24VA F01	/3.A4 /3.B4
Name: 2C.LTV Harness:	1 2	WH BK			O-01 G1.0VA	/3.G6 /3.I6
Name: 2C.RS2 Harness:	1 2	WH BK			RS2 G1.24VA	/5.C11 /5.C10
Name: 3C.RS1 Harness:	1 2 3	WH BK GN			F05 G1.0VA G	/5.C11 /5.C8 /5.C12
Name: FM.CBL Harness:	1				FM.CBL	/4.E11
Name: Servo Comm Cable Harness:	1 2 3 4 5 6 7 8	GN BK WH BL RD YL BR OR			G2.24VB O-06	/5.D5 /5.D5
Name: Servo Power Cable Harness:	1 2 3 4	RD BK BL OR			O-05 F06 G1.0VA G1.0VA G2.24VA G2.0VB G2.24VB	/5.D5 /5.D5 /5.D4 /5.D4 /5.D3 /5.D2 /5.C2

Electrical Component BOM

Component Name	Description	Model	Quantity
Cable Duct	(W x H) 9.00 in x 0.53 in	CPMS-CABLE-CTRL-AM660	2
Cable Head	Servo Motor Communication Cable	CPMS-CABLE-PWR-KM660	1
Cable Head	Servo Motor Power Cable		1
DIN Rail	(W x H) 3.00 in x 1.38 in		1
DIN Rail	(W x H) 6.00 in x 1.38 in		1
DIN Rail	(W x H) 8.00 in x 1.37 in	B-1519-1	1
Liquid Level Switch	NO Float Switch	CPM-MCVC-3421H-RLS	1
Motor DC	Servo Motor	854J-24GL4	1
Pilot Light - Blinking	24V Red Blinking Indicator	2080-REMLCD	1
PLC Module	AB Remote LCD Display	FD-XA5E	1
PLC Module	FD-X Panel Mount Flowmeter Controller	FD-XS20E	1
PLC Module	Keyence FD-X Sensorhead	2080-LC20-20QBB	1
PLC Module	Micro820 PLC	2080-PS120-240VAC	1
Power Supply AC/DC - Switching	24V 38.4W PSU	CS7-31	2
Proximity Sensor - Capacitive	24V Cylinder Reed Switch	VP742-5DZ1-04TA	1
Solenoid	24V 3-Way Poppet Valve	K71DA00KS6KV21W2	2
Solenoid	24V 4-Way Solenoid Valve	1492-P2T	1
Terminal	3 Point Terminal Block	1492-PD3	4
Terminal	4 Point, 2 Level Terminal Block	1492-PS2-3	5
Terminal	Sensor Terminal Block		13

AMCOL
Corporation



3063-HMA Support

21435 Dequindre, Hazel Park, MI 48030	248-414-5700	fax: 248-414-7489	www.amcolcorp.com
---------------------------------------	--------------	-------------------	--