

HEATLESS DESICCANT AIR DRYER ELECTRICAL SCHEMATICS

WIRING METHODS
 POWER 460V = BLACK THHN
 120VAC = RED 16AWG
 NEUTRAL = WHITE 16AWG
 24VDC = BLUE 18AWG
 24V COMMON = WHITE/BLUE 18AWG
 GROUND = GREEN

SCHEMATIC TYPICAL INDEX
 POWER DISTRIBUTION/BRANCH CIRCUITS
 PLC BASE UNIT INPUT/OUTPUTS
 PLC OUTPUT CARD
 PLC THERMOCOUPLE CARD
 TERMINAL LAYOUTS
 ENCLOSURE

Test Wire Size Installed In Connector AWG or MCM (mm ²)		Tightening Torque, Pound-Inches (N.m)			
		Slotted Head No. 10 and Larger ¹		Hexagonal Head - External Drive Socket Wrench	
		Slot Width - 0.047 Inch (1.2 mm) or Less and Slot Length 1/4 Inch (6.4 mm) or Less	Slot Width - Over 0.047 Inch (1.2 mm) or Slot Length - Over 1/4 Inch (6.4 mm)	Split-Bolt Connectors	Other Connectors
18-10	(.082-5.3)	20 (2.3)	35 (4.0)	80 (9.0)	75 (8.5)
8	(8.4)	25 (2.8)	40 (4.5)	80 (9.0)	75 (8.5)
6-4	(13.3-21.2)	35 (4.0)	45 (5.1)	165 (18.6)	110 (12.4)
3	(26.7)	35 (4.0)	50 (5.6)	275 (31.1)	150 (16.9)
2	(33.6)	40 (4.5)	50 (5.6)	275 (31.1)	150 (16.9)
1	(42.4)	-	50 (5.6)	275 (31.1)	150 (16.9)
1/0-2/0	(53.5-67.4)	-	50 (5.6)	385 (43.5)	180 (20.3)
3/0-4/0	(85.0-107.2)	-	50 (5.6)	500 (56.5)	250 (28.2)
250-350	(127-177)	-	50 (5.6)	650 (73.4)	325 (36.7)
400	(203)	-	50 (5.6)	825 (93.2)	325 (36.7)
500	(253)	-	50 (5.6)	825 (93.2)	375 (42.4)
600-750	(304-380)	-	50 (5.6)	1000 (113.0)	375 (42.4)
800-1000	(406-508)	-	50 (5.6)	1000 (124.3)	500 (56.5)
1250-2000	(635-1010)	-	-	1100 (124.3)	600 (67.8)

TABLE 7.4:
¹ For values of slot width or length not corresponding to those specified, select the largest torque value associated with the conductor size. Slot width is the nominal design value. Slot length is measured at the bottom of the slot.

MAX VOLTAGE_____115_____

TOTAL MCA_____1.6 AMP_____

LARGEST MOTOR FLA____N/A____

NUMBER OF PHASES_____1_____

FREQUENCY_____60HZ_____

CUSTOMER SERIAL

NO._____

UNDERWRITERS LAB SERIAL

NO.____



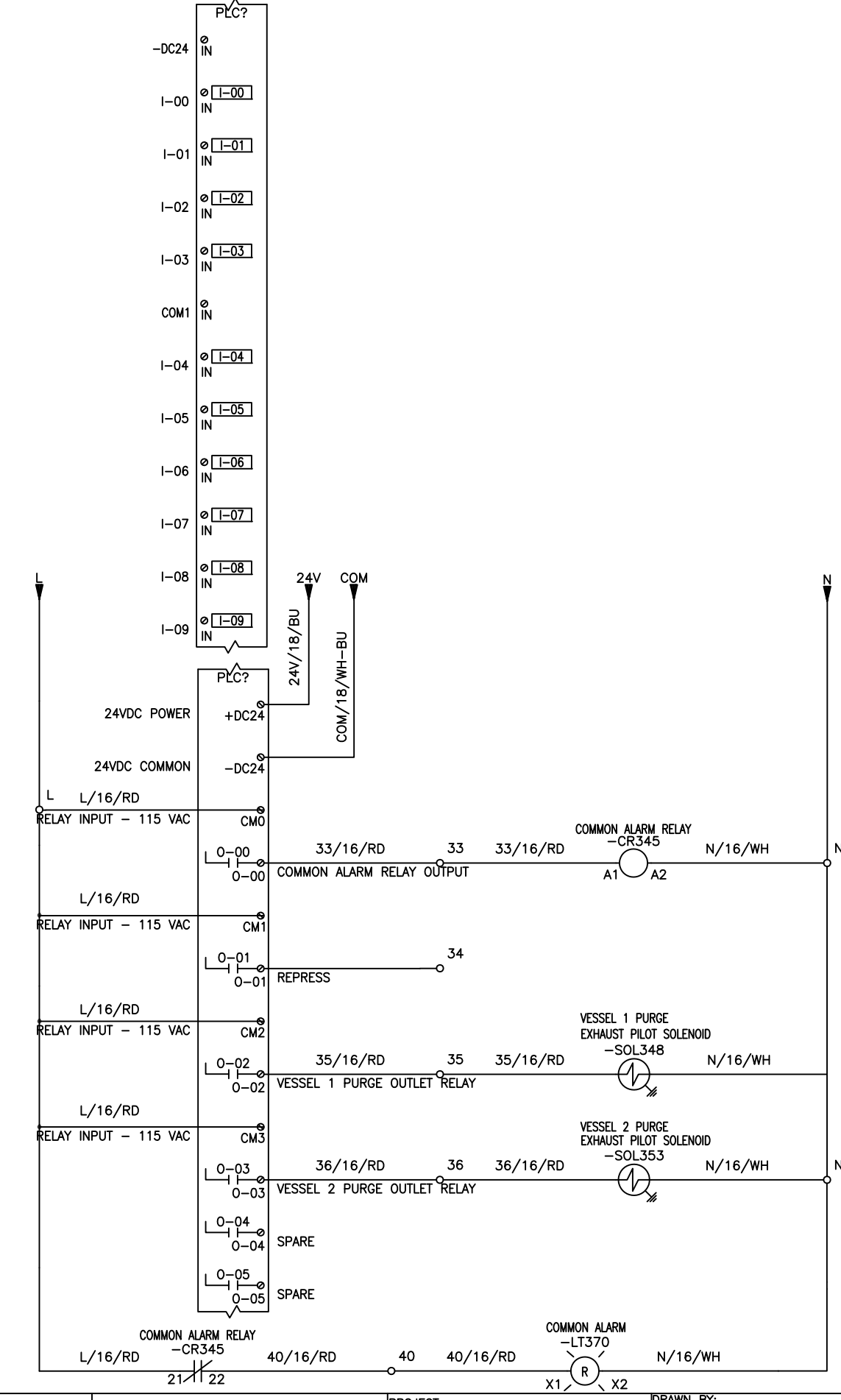
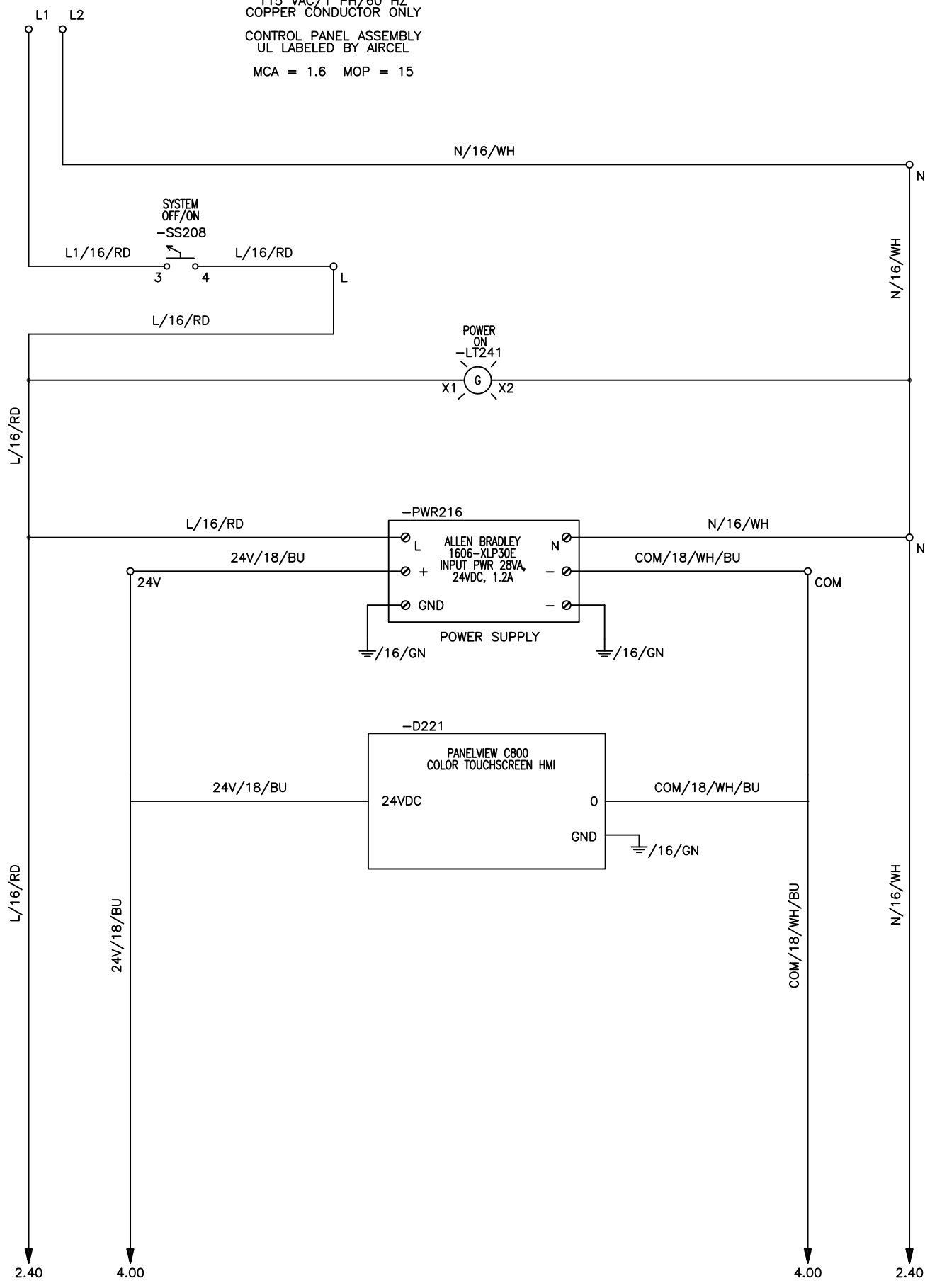
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PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB NO.	DRAWING NUMBER:
PAGE DESCRIPTION TORQUE TABLE		AG3956009-1 OF 7

CUSTOMER SUPPLY
 115 VAC/1 PH/60 HZ
 COPPER CONDUCTOR ONLY
 CONTROL PANEL ASSEMBLY
 UL LABELED BY AIRCEL
 MCA = 1.6 MOP = 15



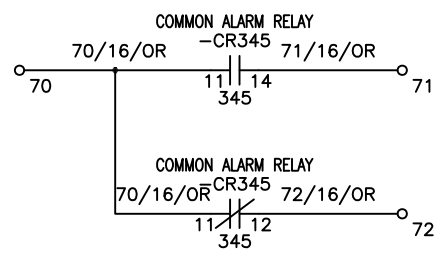
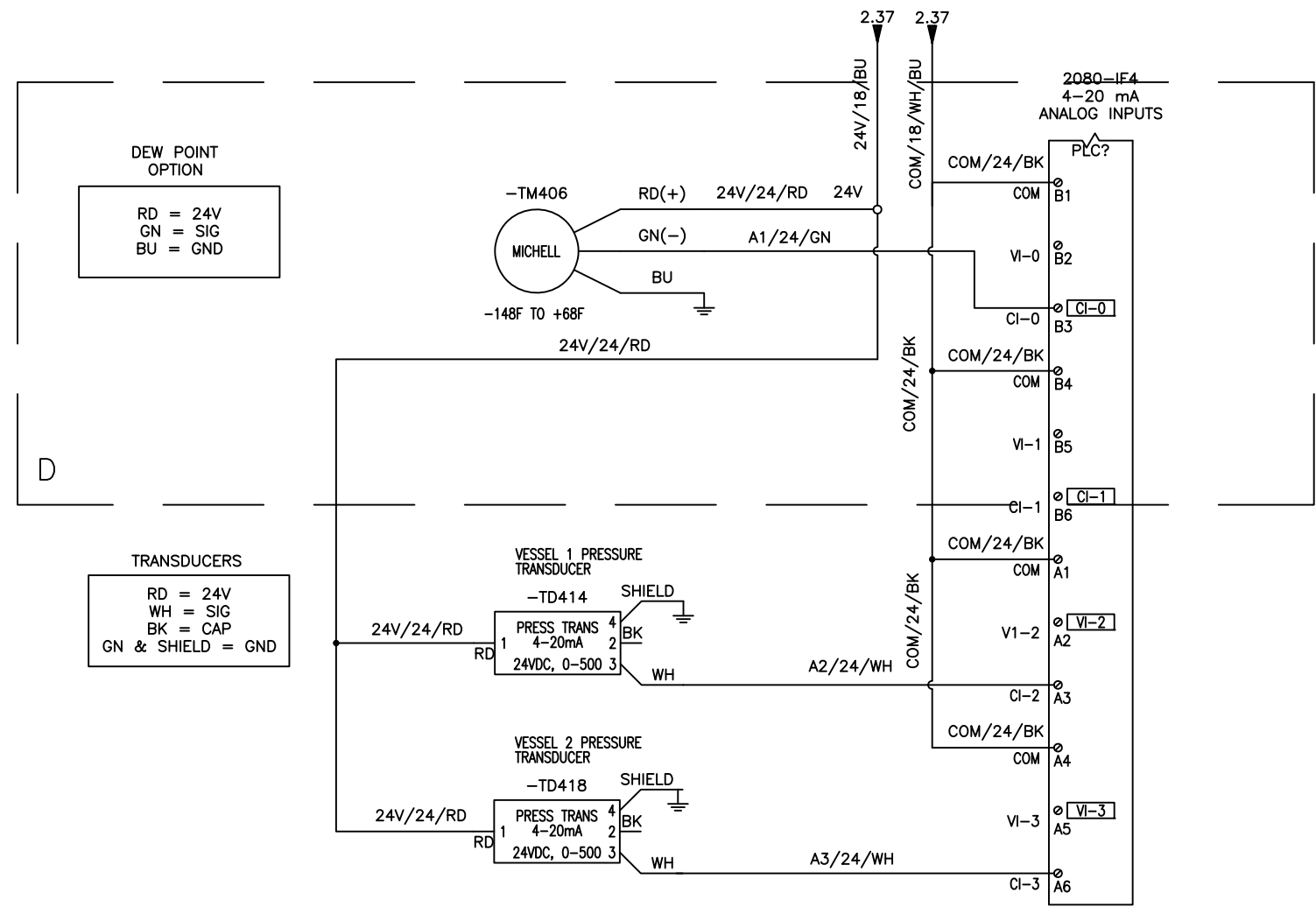
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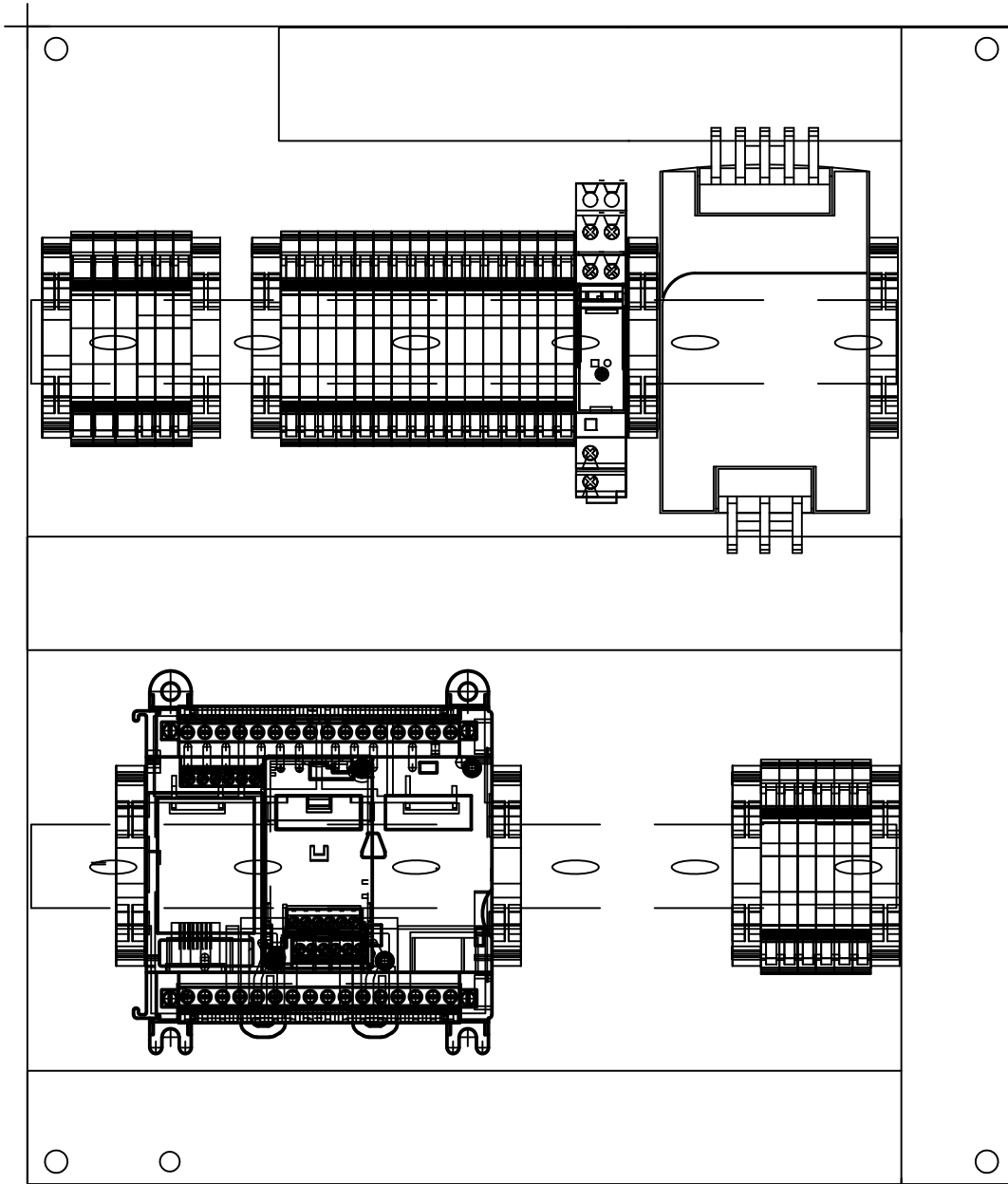
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PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB NO.	DRAWING NUMBER: AG3956009-2 OF 7
PAGE DESCRIPTION POWER DIST/PLC I/O		



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TITLE DESCRIPTION	CHK'D BY:	DATE:
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB NO.	DRAWING NUMBER: AG3956009-3 OF 7
PAGE DESCRIPTION ANALOG INPUTS		



Description for BOM	Line Number	Stock Number	QTY
PLC, MICRO-820	10	AG3942710	1
PLC, ANALOG CARD	20	AG3942710	1
RELAY, SCREW TYPE, DPDT	30	AG3948855	1
ANCHOR, SCREW END, GRAY	40	AG3251901	6
TERMINAL BLOCK,GRAY, J3	50	AG3933345	14
TERMINAL BLOCK, BLUE, J3	60	AG3933672	4
TERMINAL BLOCK, GREEN/YELLOW, J3	70	AG3933346	2
TERMINAL BLOCK, GRAY, J4	80	AG3253101	2
TERMINAL BLOCK, GREEN/YELLOW, J4	90	AG3253001	1
POWER SUPPLY, 24VDC	100	AG3934654	1
PANEL, BACKPLATE, FITS 14x12	110	AG3197201	1
COVER, WHITE DUCT, 1"	120	AG3480590	7.5

END ANCHOR
L1 - J4
L2 - J4
GND - J4
50
51
52
END ANCHOR

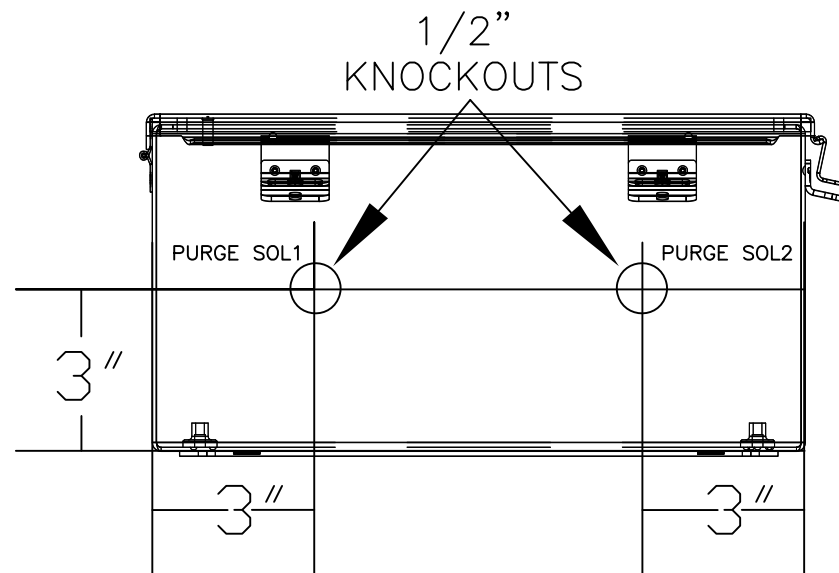
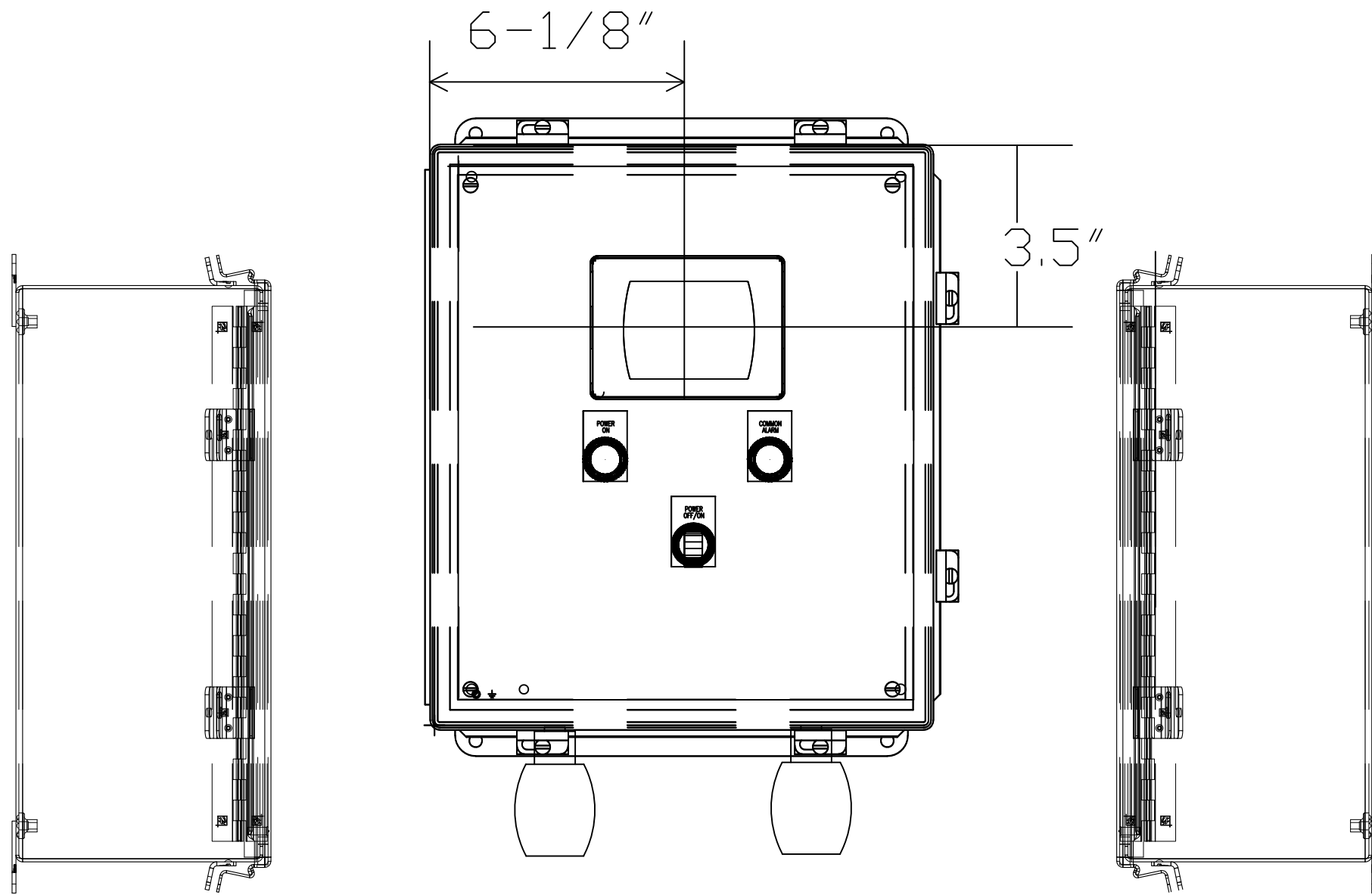
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RELAY DPDT
END ANCHOR
24V PWR SPLY
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PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB NO.	DRAWING NUMBER: AG3956009-4 OF 6
PAGE DESCRIPTION BACKPLATE LAYOUT		



Description for BOM	Line Number	Stock Number	QTY
ETHERNET PATCH CABLE, 5'	130	AG3935891	1
HMI, PANELVIEW C800 - 4"	140	AG3992107	1
LIGHT, LED, GREEN, PILOT	150	AG3956015	1
LIGHT, LED, RED, PILOT	160	AG3956016	1
SWITCH, 2-POSITION	170	AG3956014	1
ENCLOSURE, 14X12, POLYCARB	180	AG3956011	1
VALVE, SOLENOID, 3 WAY, NEMA 4, 1/4"	190	AG3101501	2
HUB, MYERS, 1/2"	200	AG3288701	2
NIPPLE, CONDUIT, 1/2" x CLOSE	210	AG3342801	2

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PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB NO.	DRAWING NUMBER: AG3956009-5 OF 6
PAGE DESCRIPTION DOOR LAYOUT		

Description for BOM	Stock Number	Quantity per Dryer
PLC, MICRO-820	AG3942710	1
ETHERNET PATCH CABLE, 5'	AG3935891	1
HMI, PANELVIEW C800 - 4"	AG3992107	1
RELAY, SCREW TYPE, SPDT	AG3948856	1
ANCHOR, SCREW END, GRAY	AG3251901	6
TERMINAL BLOCK, GRAY, J3	AG3933345	14
TERMINAL BLOCK, BLUE, J3	AG3933672	4
TERMINAL BLOCK, GREEN/YELLOW, J3	AG3933346	2
TERMINAL BLOCK, GRAY, J4	AG3253101	2
TERMINAL BLOCK, GREEN/YELLOW, J4	AG3253001	1
POWER SUPPLY, 24VDC	AG3934654	1
PANEL, BACKPLATE, FITS 14x12	AG3197201	1
COVER, WHITE DUCT, 1"	AG3480590	7.5
DUCT, WHITE, NARROW, SLOT, 1"x 3"	AG3480591	7.5

Description for BOM	Stock Number	Quantity per Dryer
PLC, ANALOG CARD	AG3942716	1
LIGHT, LED, GREEN, PILOT	AG3956015	1
LIGHT, LED, RED, PILOT	AG3956016	1
SWITCH, 2-POSITION	AG3956014	1
ENCLOSURE, 14X12, POLYCARB	AG3956011	1
VALVE, SOLENOID, 3 WAY, NEMA 4, 1/4"	AG3101501	2
HUB, MYERS, 1/2"	AG3288701	2
NIPPLE, CONDUIT, 1/2" x CLOSE	AG3342801	2
WIRE #18, BLUE	AG3480463	80
WIRE #18, RED	AG3480947	98
WIRE #18, WHITE	AG3480948	17
WIRE #18, WHITE/BLUE	AG3480991	9.5
WIRE #16, ORANGE	AG3373901	6
WIRE #16, GREEN	AG3372301	12
TRANSDUCER, 0-500 PSI	AG3936238	2

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PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB NO.	DRAWING NUMBER: AG3956009-6 OF 6
PAGE DESCRIPTION EBOM		