ABP-1400 BLOWER PURGE HEATED 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

Test Wire Size Installed In Connector AWG or MCM (mm[1])		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____460______
TOTAL MCA_____69.9_____
LARGEST MOTOR FLA___14___
NUMBER OF PHASES____3____
FREQUENCY_______60HZ_____

Underwriters Laboratories Inc. LISTED

CUSTOMER SERIAL NO.______
UNDERWRITERS LAB SERIAL NO.__

Underwriters Laboratories Inc. LISTED

NOTES:

REV	REVISION DESCRIPTION	APPROVAL/DATE
1	PRODUCTION REDLINES	09/10/2015
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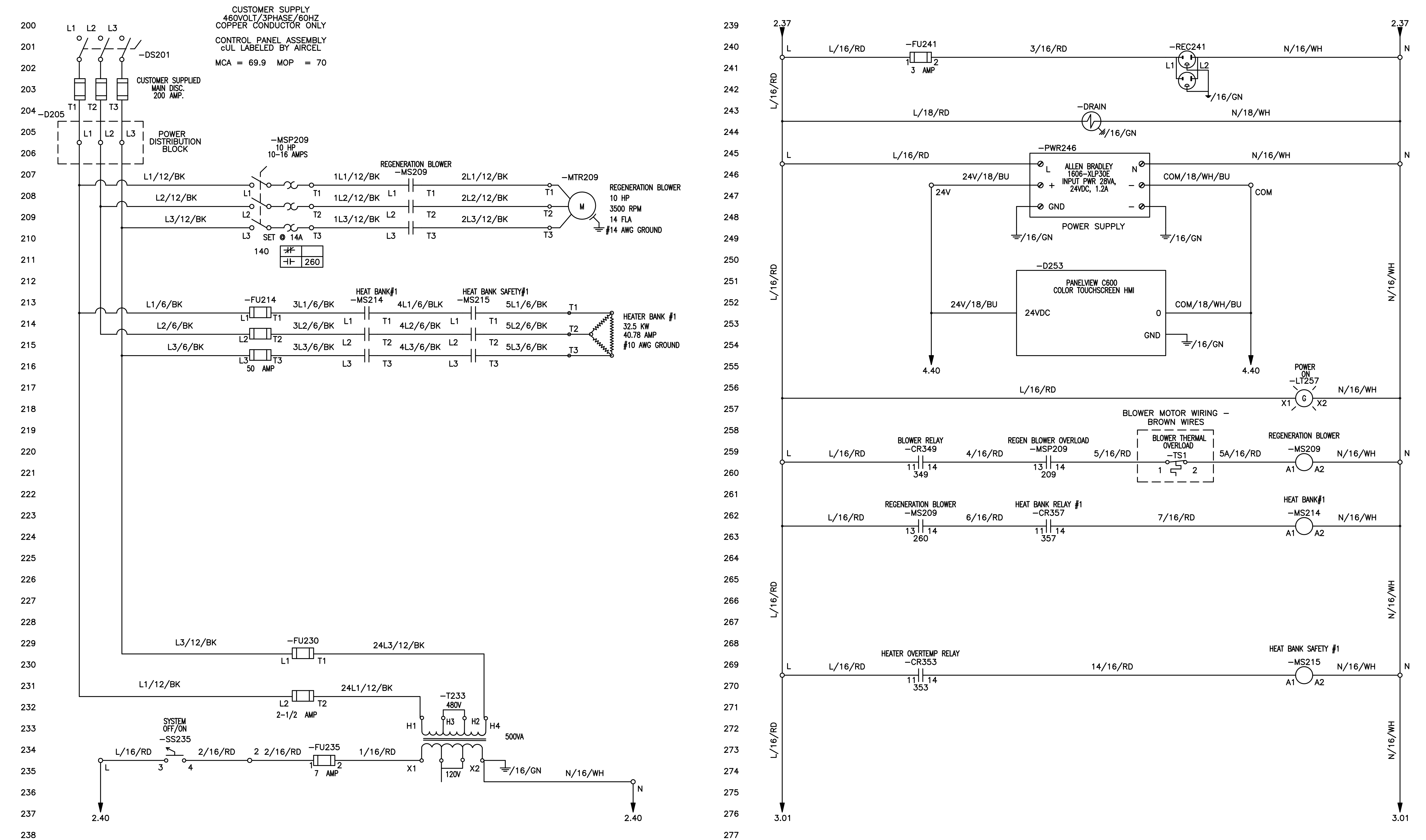
PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN	DATE 02/14/13
TITLE DESCRIPTION	CHK'D BY MICHAEL.SCWEER	DATE 02/14/13
PAGE DESCRIPTION TORQUE TABLE	JOB No. ABP-E4	DRAWING No. AG3935963 - 1 of 8
PAGE DESCRIPTION		



NOTES:

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1	PRODUCTION REDLINES	09/10/2015
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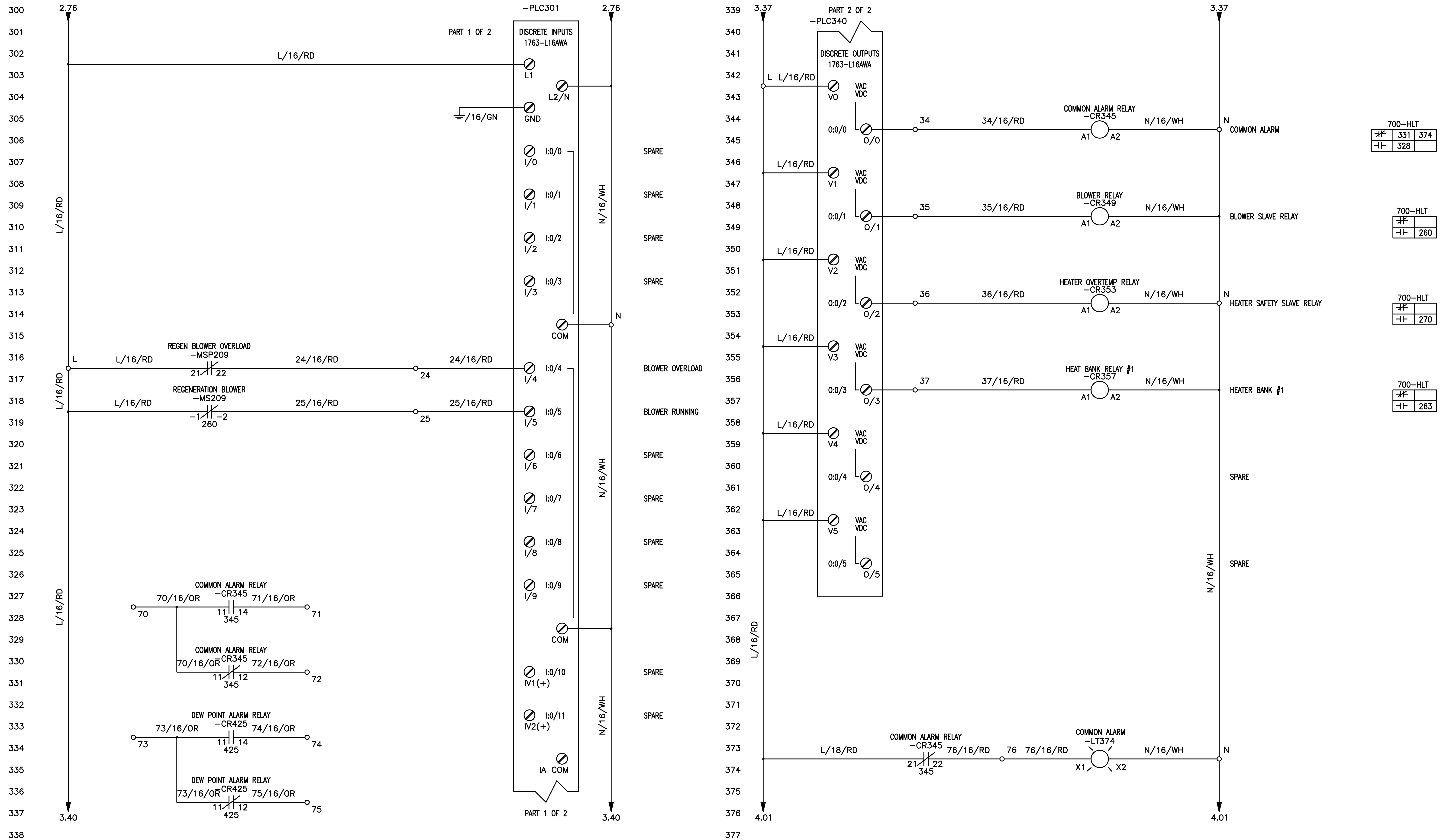
PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN		DATE 02/12/2013
TITLE DESCRIPTION	CHK'D BY MICHAEL.SCHWEER		DATE 02/12/2013
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB No.		DRAWING No.
PAGE DESCRIPTION POWER DISTRIBUTION	ABP-E4		AG3935963 - 2 of 8



NOTES:

REV	REVISION DESCRIPTION	APPROVAL/DATE
1	PRODUCTION REDLINES	09/10/2015
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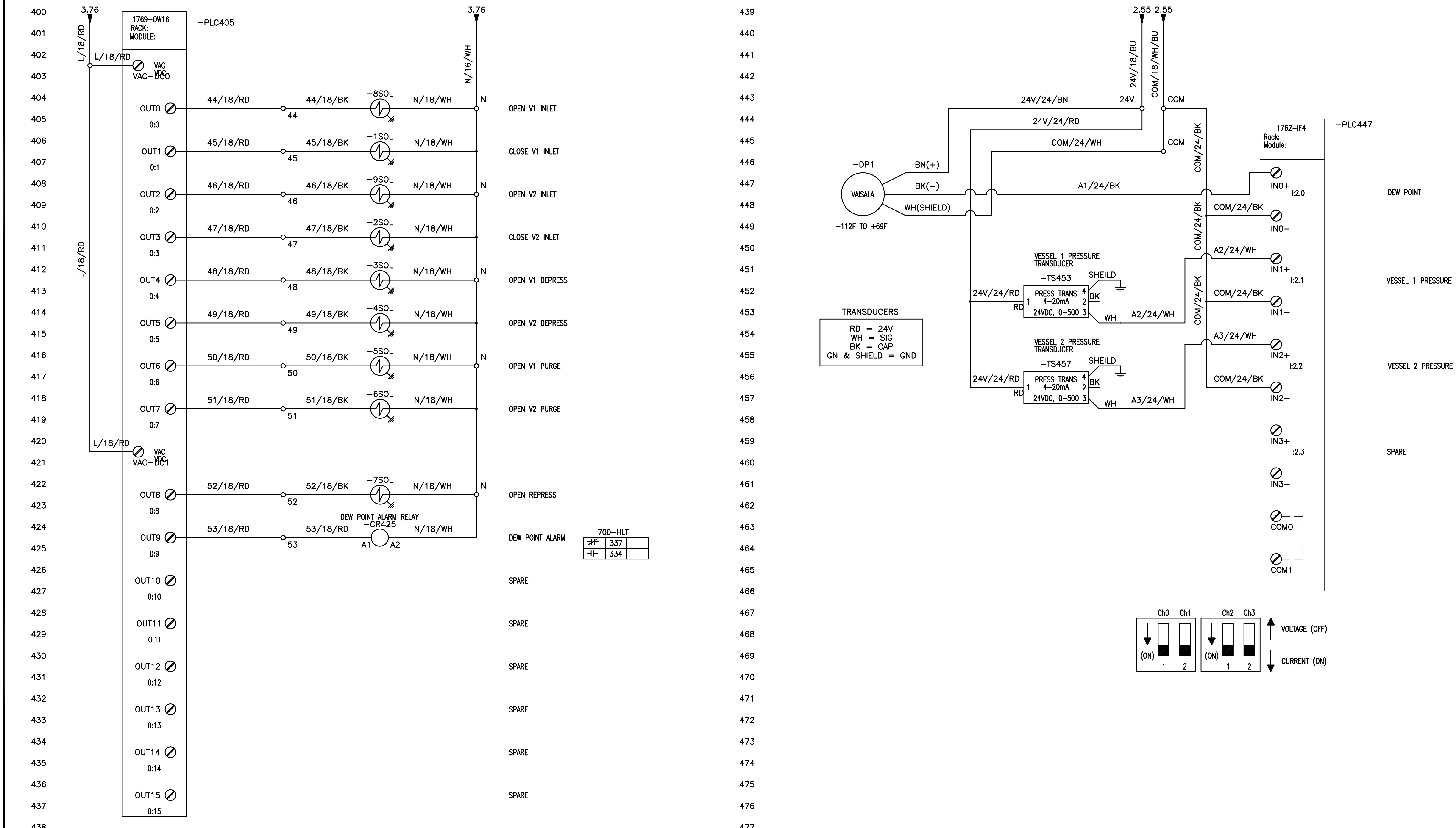
PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN	DATE 02/12/2013
TITLE DESCRIPTION	CHK'D BY MICHAEL.SCHWEER	DATE 02/12/2013
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB No. ABP-E4	DRAWING No. AG3935963 - 3 of 8
PAGE DESCRIPTION PLC BASE INPUTS		



NOTES:

REV	REVISION DESCRIPTION	APPROVAL/DATE
1	PRODUCTION REDLINES	09/10/2015
2	DMT SENSOR CHANGED	08/01/2016
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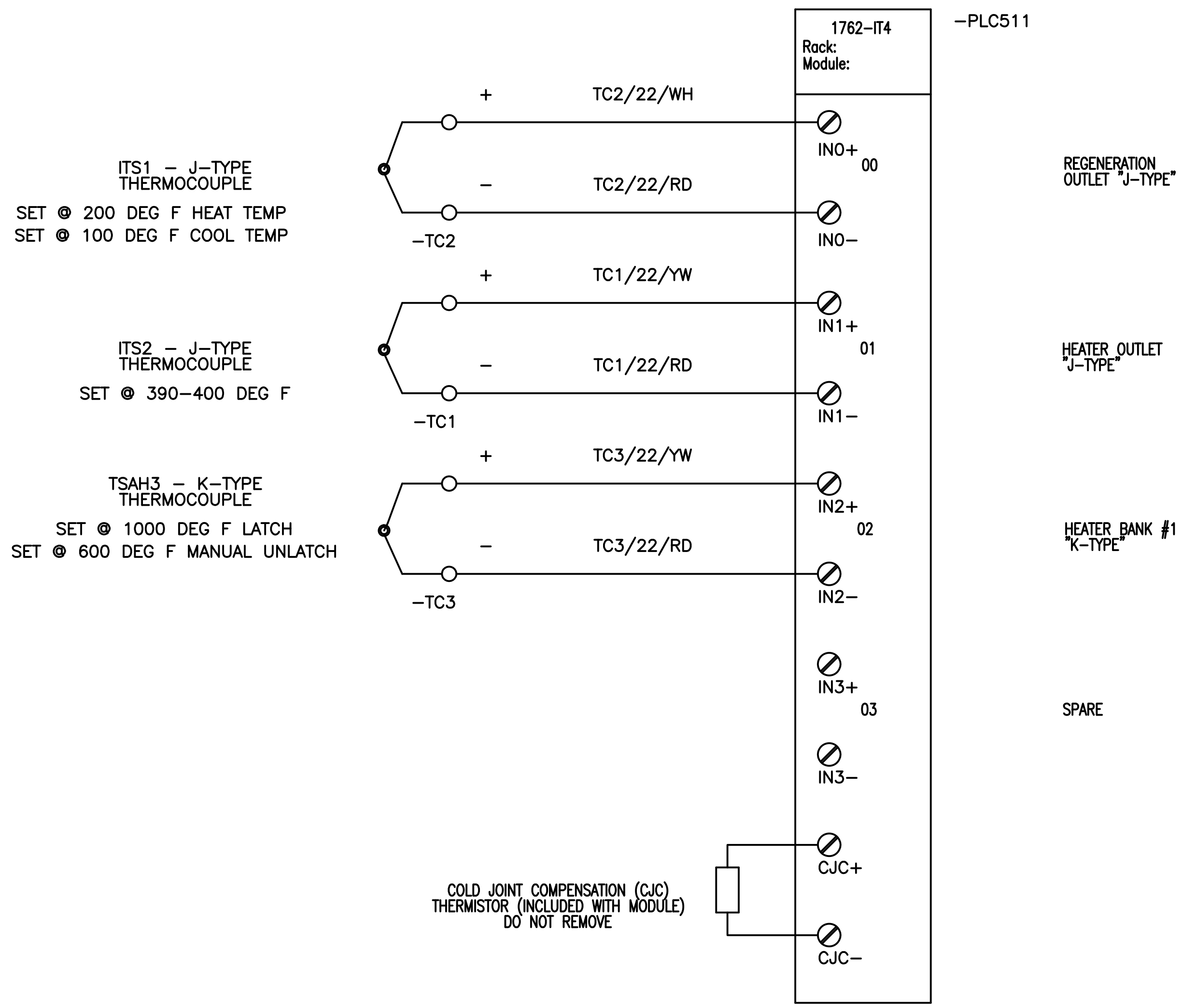
PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN	DATE 02/12/2013
TITLE DESCRIPTION	CHK'D BY MICHAEL.SCHWEER	DATE 02/12/2013
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB No. ABP-E4	DRAWING No. AG3935963 - 4 of 8
PAGE DESCRIPTION PLC BASE OUTPUTS		



NOTES:

REV	REVISION DESCRIPTION	APPROVAL/DATE
1	PRODUCTION REDLINES	09/10/2015
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TITLE DESCRIPTION	CHK'D BY MICHAEL.SCHWEER	DATE 02/12/2013
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB No. ABP-E4	DRAWING No. AG3935963 - 5 of 8
PAGE DESCRIPTION PLC THERM INPUTS		

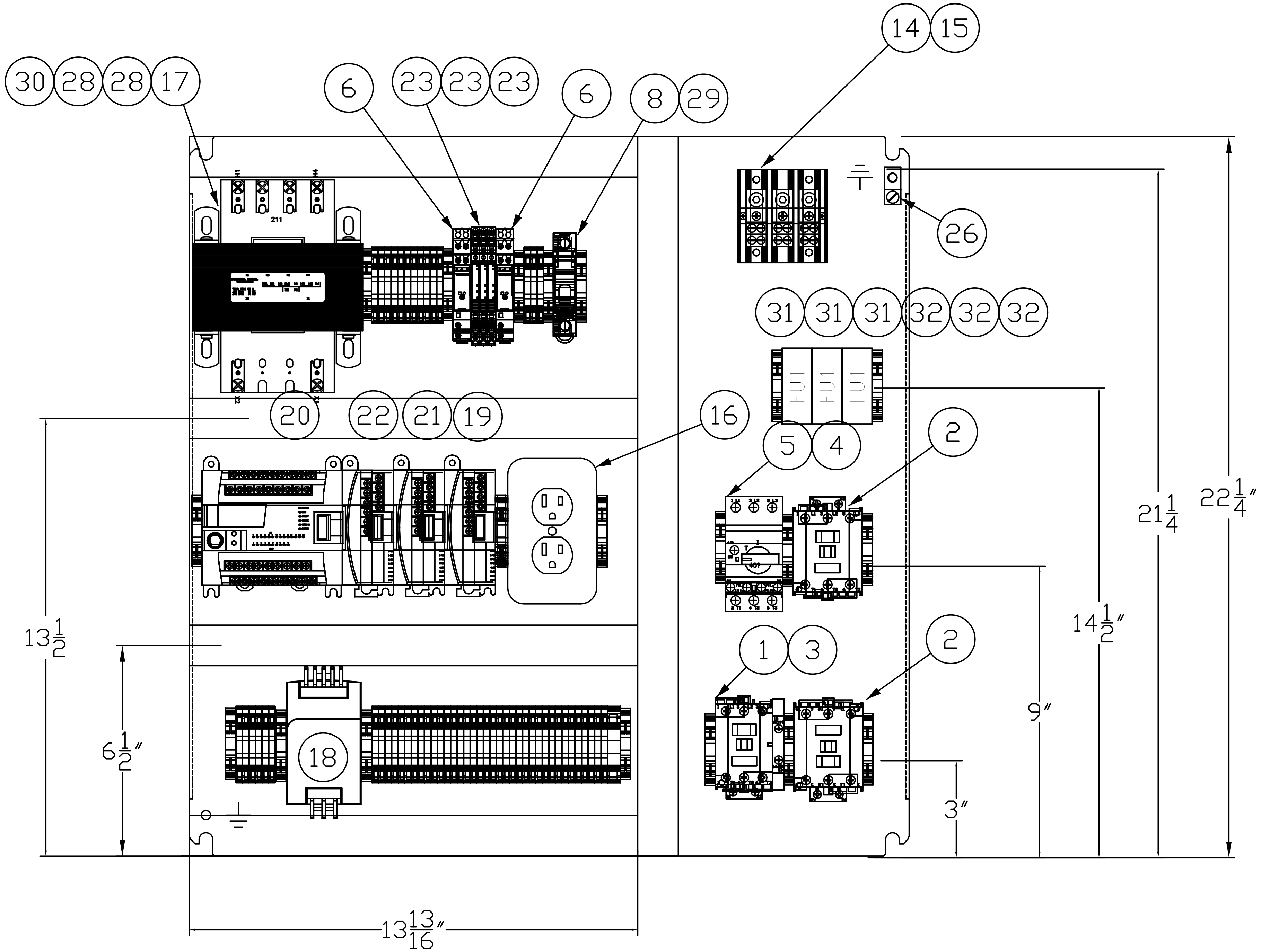
TOP ROW TERMINALS

END ANCHOR	N	N	N	N	L	L	L	L	24	25	RELAY-DPDT	RELAY-SPDT	RELAY-SPDT	RELAY-SPDT	RELAY-DPDT	GND - J3	GND - J3	GND - J3	END ANCHOR	FUSE HOLDER	END ANCHOR

BOND L's AND N's

BOTTOM ROW TERMINALS

END ANCHOR	24V	24V	24V	COM	COM	COM	END ANCHOR	PWR SPPLY	END ANCHOR	N	N	N	N	L	L	L	L	2	34	35	36	37	44	45	46	47	48	49	50	51	52	53	70	71	72	73	74	75	76	GND - J3	GND - J3	GND - J3	GND - J3	GND - J10	END ANCHOR



ITEM#	AIRCEL PART NUMBER	DESCRIPTION	QTY
1	AG3948888	CONTACTOR, 10HP @460V	1
2	AG3939577	CONTACTOR, 30HP @ 460V	2
3	AG3948852	CONTACTOR, SIDE MOUNT, AUXILLA	1
4	AG3948844	SWITCH, AUXILLARY, FRONT MOUNT	1
5	AG3948893	MOTOR STARTER PROTECTOR, 10 - 16 AMPS	1
6	AG3948855	RELAY, SCREW TYPE TERMINAL, DPDT	2
7	AG3251901	ANCHOR, SCREW END, GRAY	19
8	AG3948853	FUSE HOLDER, 1-POLE, CLASS CC	1
9	AG3933345	TERMINAL BLK,GRY,FEED THROUGH	38
10	AG3933672	TERMINAL BLOCK, BLU, FEED THRU	8
11	AG3480613	TERMINAL BLOCK, IEC 1-CIRCUIT	1
12	AG3933346	TERMINAL BLK, GRN/YEL GROUND T	7
14	AG3933254	POWER BLOCK COVER	1
15	AG3933253	POWER BLOCK, 600VAC,335A,	1
16	AG3939627	RECEPTACLE GFCI, STRAIGHT	1
17	AG3939554	TRANSFORMER,500VA,PRIM-230,460	1
18	AG3934654	POWER SUPPLY, INPUT 100.240VAC	1
19	AG3480143	PLC, THERMOCOUPLE CARD, IT4	1
20	AG3480020	PLC, MICROLOGIX-1100	1
21	AG3480021	PLC, ANALOG CARD, IF4	1
22	AG3954507	PLC, OUTPUT CARD, OW16	1
23	AG3948856	RELAY, SCREW TYPE TERMINAL	3
24	AG3934442	BACK PLATE, FITS 24x24 ENCLOSURE	1
25	AG3480590	COVER, WHITE DUCT, 1"	7
26	AG3482390	GROUND LUG, 8 AWG TO 1/0	1
27	AG3480591	DUCT, WHITE, NARROW, SLOT, 1"X 3"	7
28	AG3443601	FUSE, 2-1/2 AMPS	2
29	AG3329701	FUSE, 3 AMPS	1
30	AG3343701	FUSE, 7 AMPS	1
31	AG3112701	FUSE ,CUBE, 600VAC ,50 AMP,	3
32	AG3205401	FUSE HOLDER ,FOR CUBE FUSE, 1-	3

NOTES:

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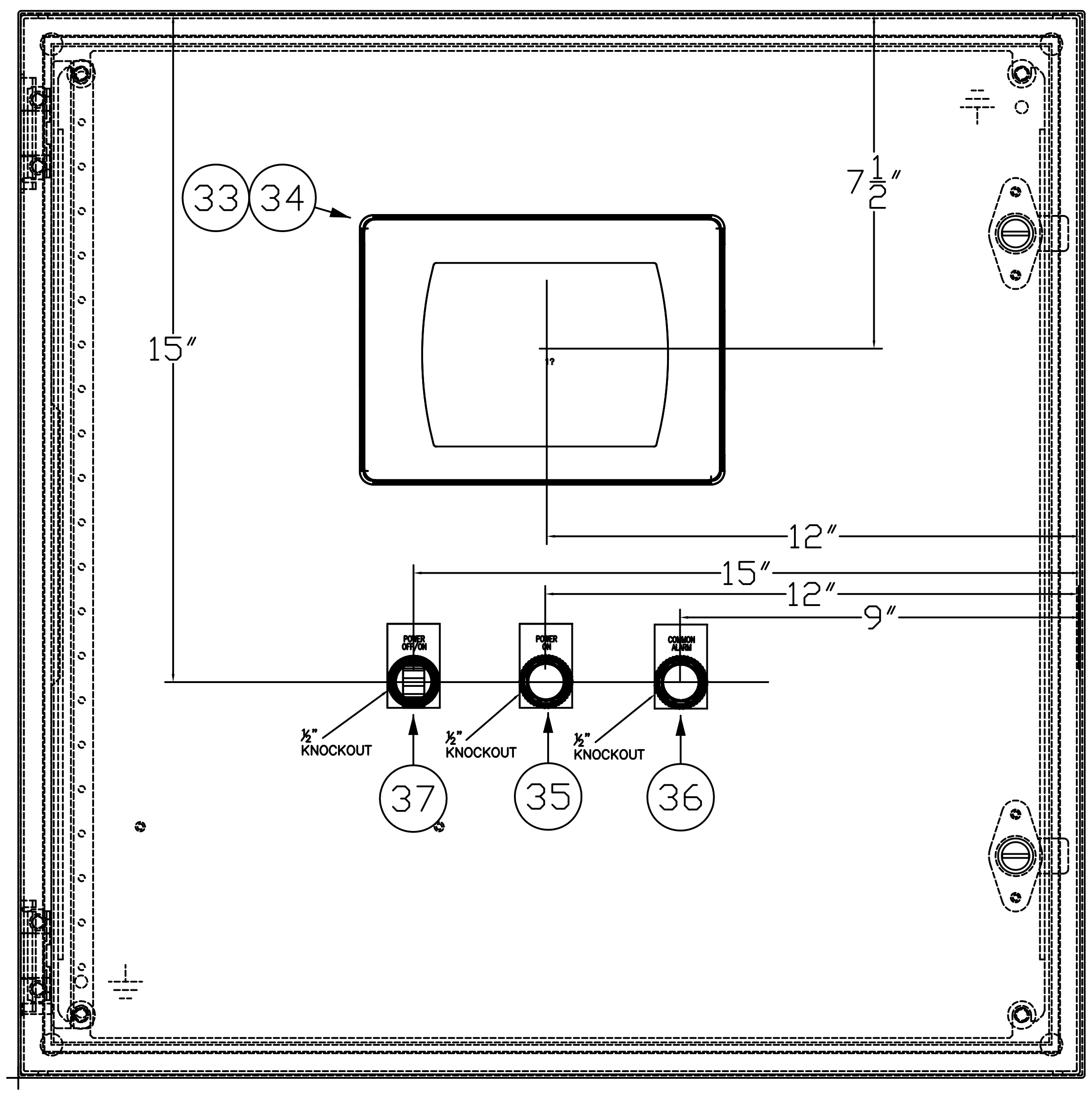
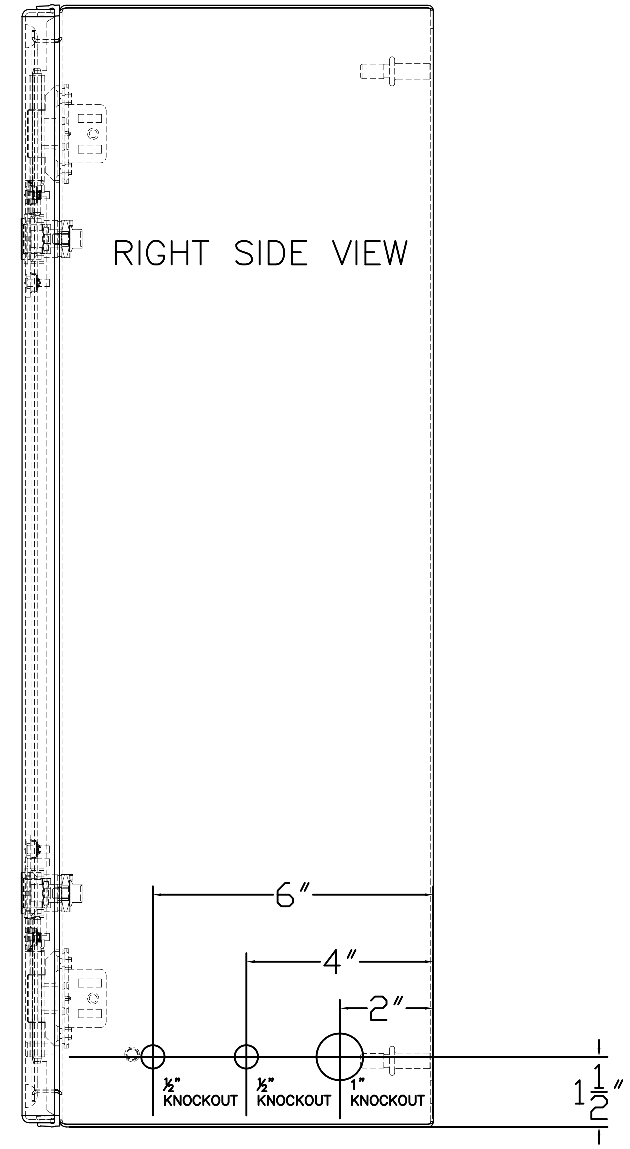
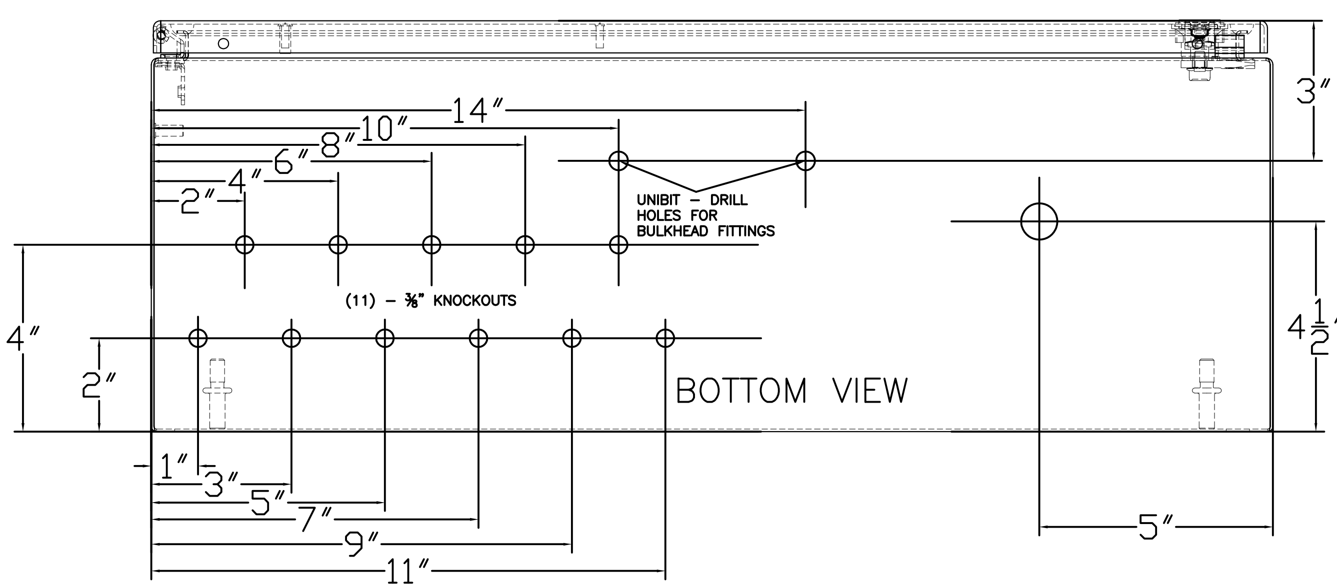
PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN	DATE 02/12/2013
TITLE DESCRIPTION	CHK'D BY MICHALE.SCHWEER	DATE 02/12/2013
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB No. ABP-E4	DRAWING No. AG3935963 - 6 of 8
PAGE DESCRIPTION PANEL LAYOUT		







ITEM#	AIRCEL PART NUMBER	DESCRIPTION	QTY
33	1C932208-US	CABLE, RS-232, 8-PIN MINI DIN	1
34	AG3992110	HMI, AB PANELVIEW C800, TOUCH SCREEN	1
35	AG3939623	LIGHT, GREEN, PLASTIC, 120VAC	1
36	AG3939624	LIGHT, RED, PLASTIC, 120VAC	1
37	AG3939622	SWITCH, 2-POS, PLASTIC	1
38	AG3934441	ENCLOSURE, CONCEPT, 24x24x8	1

NOTES:

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PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN	DATE 02/13/13	
TITLE DESCRIPTION	CHK'D BY MICHAEL.SCHWEER	DATE 02/13/13	
PAGE DESCRIPTION ELECTRICAL SCHEMATICS	JOB No. ABP-E4	DRAWING No. AG3935963 - 7 of 8	
PAGE DESCRIPTION ENCLOSURE LAYOUT			

AIRCEL PART NUMBER	DESCRIPTION	QTY
AG3948888	CONTACTOR, 10 HP @ 460V,	1.0
AG3939577	CONTACTOR, 30 HP @ 460V	2.0
AG3948852	CONTACTOR, SIDE MOUNT, AUXILLA	1.0
AG3948844	SWITCH, AUXILLARY, FRONT MOUNT	1.0
AG3948893	MOTOR STARTER PROTECTOR,	1.0
AG3251901	ANCHOR, SCREW END, GRAY	19.0
AG3948853	FUSE HOLDER, 1-POLE, CLASS CC	1.0
AG3933345	TERMINAL BLK,GRY,FEED THROUGH	41.0
AG3933672	TERMINAL BLOCK, BLU, FEED THRU	8.0
AG3480613	TERMINAL BLOCK, IEC 1-CIRCUIT	1.0
AG3933346	TERMINAL BLK, GRN/YEL GROUND T	6.0
AG3933256	POWER DISTRIBUTION BLOCK,	1.0
AG3933257	COVER, POWER DISTRIBUTION	1.0
AG3939627	RECEPTACLE GFCI, STRAIGHT	1.0
AG3939554	TRANSFORMER,500VA,PRIM-230,460	1.0
AG3934654	POWER SUPPLY, INPUT 100 240	1.0
1C932208-US	CABLE, RS-232, 8 PIN MINI DIN	1.0
AG3480143	PLC, MICROLOGIX 4X	1.0
AG3480020	PLC, MICRO, 1100, PWR-120/240V	1.0
AG3480021	PLC, MICROLOGIX CHANNEL	1.0
AG3954507	PLC, MICROLOGIX, 16X RELAY	1.0
1C932146-US	SOLENOID 1/8" 4/2 115/120V 50	9.0
AG3992110	HMI, AB PANEVIEW C600, TOUCH S	1.0
AG3948856	RELAY, SCREW TYPE TERMINAL	3.0
AG3939623	LIGHT, GREEN, PLASTIC, 120VAC	1.0
AG3939624	LIGHT, RED, PLASTIC, 120VAC	1.0
AG3939622	SWITCH, 2-POS, PLASTIC	1.0
AG3934441	ELECTRICAL ENCLOSURE, 24" W X	1.0
AG3939364	PANEL, BACK PLATE FOR HOFFMAN	1.0
AG3480590	COVER, WHITE DUCT, 1"	18.0
AG3182201	DUCT, WHITE, NARROW SLOT,	9.0
AG3480591	DUCT, WHITE, NARROW, SLOT,	9.0
AG3443601	FUSE, MIDGET, 2-1/2 AMPS	2.0
AG3329701	FUSE, FNQ-R-3 ,600VAC ,CLASS C	1.0
AG3205101	FUSE, MIDGET, FUSE CURRENT	1.0
AG3112701	FUSE ,CUBE, 600VAC ,50 AMP,	6.0
AG3205401	FUSE HOLDER ,FOR CUBE FUSE, 1-	6.0
AG3936238	TRANSDUCER,PRESS,0-500PSI,	2.0

AIRCEL PART NUMBER	DESCRIPTION	QTY
AG3481092	CONDUIT, RIGID, 1/2"	10.0
AG3324101	ELBOW, PULLING, 1/2"	3.0
AG3481089	UNION, 1/2" FEMALE, CONDUIT,	3.0
AG3163401	CONDUIT RED DOT BODY "T"	1.0
AG3480859	CONDUIT, SEALTITE, FLEXIBLE	5.0
AG3313701	CONNECTOR 90 LIQUID TIGHT 3/4"	1.0
AG3314001	CONNECTOR STRAIGHT LIQUID	1.0
AG3342801	NIPPLE, CONDUIT, 1/2 x CLOSE	3.0
AG3934895	BUSHING, CONDUIT, 1-1/2"x 1"	1.0
AG3481252	TERMINAL LUG, ALUMINIUM	1.0
AG3948855	RELAY, SCREW TYPE TERMINAL BLO	2.0
AG3482390	GROUND LUG, 8 GAUGE TO 1/0	1.0
AG3301501	BOLT, 5/16 x 1/2"	1.0
AG3481168	STRAIN RELIEF, 3/8"	11.0
AG3481159	SEAL RING, 3/8"	11.0
AG3481158	LOCK NUT, 3/8	11.0
AG3296601	BUSHING, CONDUIT, 3/4" x 1/2"	2.0
AG3480862	CONDUIT, SEALTITE, FLEXIBLE, 1"	2.0
AG3480953	CONNECTOR 90 LIQUID TIGHT 1"	2.0
AG3163001	CONNECTOR, CONDUIT, LT 3/8"	1.0
AG3480861	CONDUIT, SEAL TITE, 3/8"	12.0
AG3287701	CONNECTOR, ELBOW, 90 DEGREE, 3/8"	3.0
0900804	BOLT, HEX, 3/8"-16 X 1"	4.0
AG3344601	NUT, KEP, 3/8"-16	4.0
AG3284101	WASHER, FLAT, 3/8"	4.0
AG3480947	WIRE, #18 RED	20.0
AG3480463	WIRE #18 BLUE	8.0
AG3480991	WIRE #18 WHITE W/BLUE STRIPE	8.0
AG3374201	WIRE #16 RED	110.0
AG3374901	WIRE #16 WHITE	28.0
AG3372301	WIRE #16 GREEN	16.0
AG3373901	WIRE #16 ORANGE	10.0
AG3275601	WIRE #14 GREEN	7.0
AG3275201	WIRE #12 BLACK	30.0
AG3372201	WIRE #10 GREEN	10.0
AG3371501	WIRE #6 BLACK	35.0
AG3465601	CABLE, 3-CONDUCTOR	10.0
AG3481460	CORD, SJEEOW, 18/3	65.0
AG3374301	WIRE, J-TYPE THERMOCOUPLE	33.0
AG3462801	WIRE, K-TYPE THERMOCOUPLE	20.0

NOTES:

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PROJECT ABP-1400	DRAWN BY TRAVIS.RYAN	DATE 03/11/13	
TITLE DESCRIPTION	CHK'D BY MICHAEL.SCHWEER	DATE 03/11/13	
PAGE DESCRIPTION EBOM	JOB No. ABP-E4	DRAWING No. AG3935963 - 8 of 8	
PAGE DESCRIPTION			