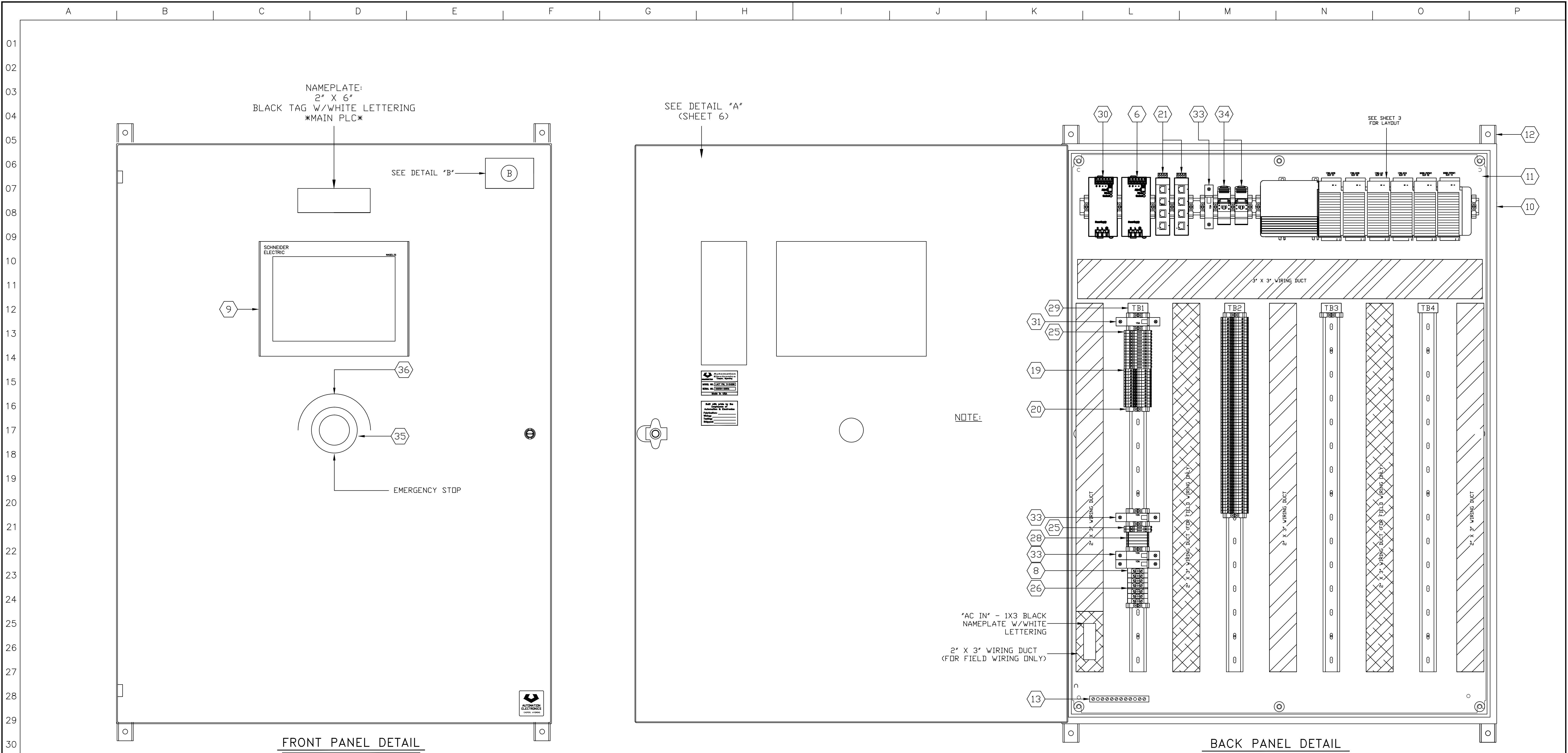


	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
01	BILL OF MATERIALS												PROJECT SPECIFIC LEGEND				
02	MARK	COUNT	DESCRIPTION	MANUFACTURER	MODEL	MARK	COUNT	DESCRIPTION	MANUFACTURER	MODEL	— UK10 TERMINAL BLOCK — DC FUSED TERMINAL BLOCK — AC FUSED TERMINAL BLOCK — TERMINAL, BLOCK UT4–MTD — GROUND TERMINAL BLOCK						
03	1	1	L4X SERIESPOWER SUPPLY, 24VDC	AB	1768-PB3	36	1	PUSHBUTTON GUARD	EATON	10250ED1241							
04	2	1	COMPACT LOGIX PROCESSOR	AB	1768-L43	37		NUMBER NOT USED									
05	3	1	DI MODULE, 16 PT.	AB	1769-IQ16	38	2	3' BLUE CAT5 CABLE	FIS	CT608003BU							
06	4	1	DEVICENET SCANNER MODULE	AB	1769-SDN	39	3	3' RED CAT5 CABLE	FIS	CT608003RD							
07	5	2	COMPACT LOGIX ETHERNET MODULE	AB	1768-ENBT	40		NUMBER NOT USED			PROJECT SPECIFIC NOTES NOTES: GENERAL 1 – MAIN DISCONNECT AND BRANCH CIRCUIT PROTECTION TO BE PROVIDED BY OTHERS. 2 – FIELD WIRING SHALL BE MTW RATED FOR 105°C. 3 – CONDUIT HUBS SHALL BE OF SAME RATING AS ENCLOSURE, 4 – USE TINNED COPPER CONDUCTORS ONLY. 5 – INSULATE ENCLOSURE WITH 1/2" RIGID INSULATION. 6 – UK 10 N TERMINAL BLOCKS 1.5–1.8 NM UK 10,3 HESI CLASS CC FUSE HOLDER 2.5–3 NM UT 35 TERMINAL BLOCK 3.2–3.7 NM UK 35 N TERMINAL BLOCK 3.2–3.7 NM SIEMENS 5SJ4 SERIES CIRCUIT BREAKERS 3.5 NM FACTORY AS-BUILT						
08	6	1	DEVICENET POWER SUPPLY	PULS	QS10.DNET	41	1	7' ORANGE CAT5 CABLE	FIS	CT608007OR							
09	7	1	MODULE END CAP, RIGHT	AB	1769-ECR	42	1	FUSE, TIME DELAY , 1 AMP	LITTELFUSE	239001P							
10	8	8	TERMINAL BLOCK, UK 10 N	PHOENIX CONTACT	3005073	43	1	FUSE, FAST ACTING, 5 AMP	FERRAZ SHAWMUT	GGM5							
11	9	1	12" MAGELLIS TOUCH PANEL	SCHNEIDER ELECTRIC	HMIGTO6310	44	1	UK10 CENTERLINE JUMPER	PHOENIX	0203276							
12	10	1	48" X 36" X 12" ENCLOSURE	HOFFMAN	CSD483612LG												
13	11	1	48" X 36" BACK PANEL	HOFFMAN	CP4836												
14	12	1	MOUNTING FOOT KIT	HOFFMAN	CMFK												
15	13	1	GROUND BUS BAR	SIEMENS	ECGB10												
16	14	1	COMPACTLOGIX 24VDC, 16 PT. DI MODULE	AB	1769-OB16												
17	15	2	C1D2, 24VDC RELAY MODULE, TYPE S SPDT	PHOENIX CONTACT	5603154												
18	16	1	FUSE, FAST ACTING, 3 AMP	FERRAZ SHAWMUT	GGM3												
19	17	1	FUSE, FAST ACTING, 2 AMP	FERRAZ SHAWMUT	GGM2												
20	18	6	FUSE, FAST ACTING, 1 AMP	FERRAZ SHAWMUT	GGM1												
21	19	41	TERMINAL BLOCK, UT 4-MTD	PHOENIX CONTACT	3046184												
22	20	24	END ANCHOR, E/NS 35N	PHOENIX CONTACT	0800886												
23	21	2	ETHERNET SWITCH, UNMANAGED, 24VDC	PHOENIX CONTACT	2891152												
24	22	2	RED JUMPER 20 POS.	PHOENIX CONTACT	3030365												
25	23	9	DC FUSE PLUG, P-FU 5X20 LED 24	PHOENIX CONTACT	3036819												
26	24	3	AC FUSE PLUG, P-FU 5X20 LA 250	PHOENIX CONTACT	3036835												
27	25	12	TERMINAL BLOCK, SINGLE LEVEL, UT 4-TG	PHOENIX CONTACT	3046142												
28	26	2	UK-10 END CAP	PHOENIX CONTACT	3003020												
29	27		NUMBER NOT USED														
30	28	6	TERMINAL BLOCK, GROUND, SINGLE LEVEL	PHOENIX CONTACT	3046207												
31	29	4	MARKER CARRIERS, UBE/D	PHOENIX CONTACT	0800307												
32	30	1	POWER SUPPLY, 24VDC, 10A	PULS	CS10.241												
33	31	1	CIRCUIT BREAKER 5SJ, 15A	SIEMENS	5SJ4118-7HG40												
34	32	2	FUSE, TIME DELAY, 5 AMP	LITTELFUSE	239005P												
35	33	4	CIRCUIT BREAKER, 10A	SIEMENS	5SJ4110-7HG40												
36	34	3	ETHERNET PUNCHDOWN BLOCK	PHOENIX CONTACT	1658118												
	35	1	EMERGENCY STOP PUSH BUTTON	EATON	10250T5J63-1X												
△ 2	11/19/14	FACTORY AS–BUILT		SMT KM	DESIGNED SMT DRAFTED KM	IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY		This drawing is the exclusive property of Automation & Electronics, Inc., and is loaned to the recipient for their confidential use only. As consideration the recipient agrees that it will not be used in any manner detrimental to the interests of Automation & Electronics, Inc., also that it shall be returned upon request, and shall not be reproduced, disposed of, or altered in any way without the written consent of Automation & Electronics, Inc.		PHONE (307) 234–9311 FAX (307) 234–9438 WEBSITE: http://www.autoelect.com EMAIL: sales@autoelect.com		TITLE: ARC POLYMER PLANT MAIN PLC BILL OF MATERIALS, NOTES, AND LEGEND		CUSTOMER: FABRICATION TECHNOLOGIES INC.			
▲ 1	8/6/14	PARTS REVIEW		CW KM	P.O. NO.:						AUTOMATION & ELECTRONICS, INC.		SHEET 1 OF 7		DRAWING NUMBER: D–29895		
▽ 0	7/8/14	SHOP AS–BUILT		CC KM									JOB NO.: 7103–03_08		2		
	NO.	DATE	REVISION	BY	DR.	SCALE: NTS											
	CAD FILE: D–29895–01–BOM			DATE: 11/19/14													



FRONT PANEL DETAIL

BACK PANEL DETAIL

NOTE:
SEE SHEET 1 FOR
BILL OF MATERIAL
NOTES AND LEGEND

3"H X 4"W
BLACK TAG WITH
1/4" WHITE
LETTERING

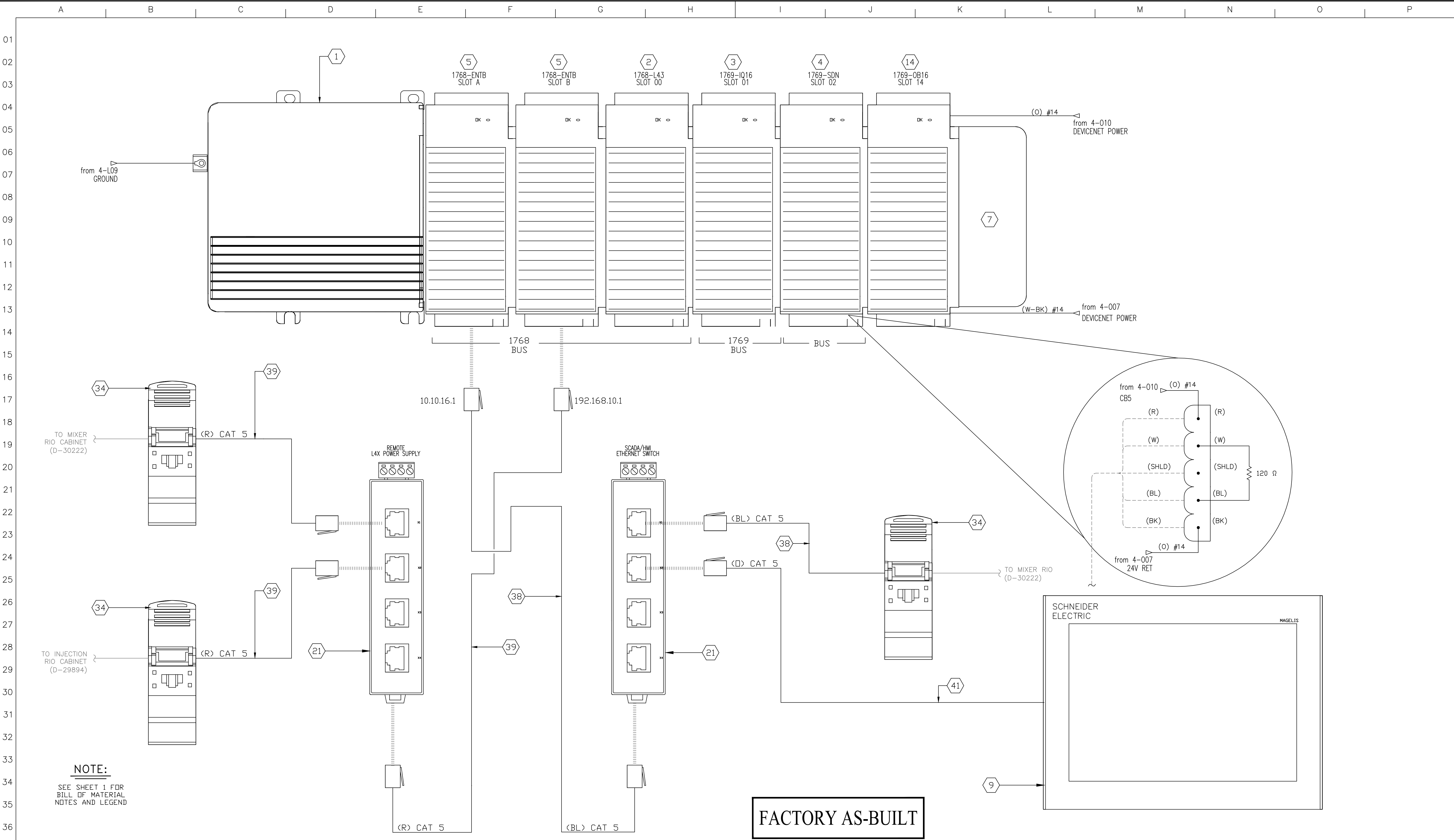
MAIN PLC PANEL
AUTOMATION & ELECTRONICS, INC.
120VAC/50Hz/10/15A
REFERENCE DRAWING D-29895
NEMA TYPE 4, 12
SCCR: 10KA RMS SYMMETRICAL
120V MAXIMUM

SS SCREWS

DETAIL "B"

FACTORY AS-BUILT

						DESIGNED		DRAFTED		IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY		This drawing is the exclusive property of Automation & Electronics, Inc., and is loaned to the recipient for their confidential use only. As consideration the recipient agrees that it will not be used in any manner detrimental to the interests of Automation & Electronics, Inc., also that it shall be returned upon request, and shall not be reproduced, disposed of, or altered in any way without the written consent of Automation & Electronics, Inc. PHONE (307) 234-9311 FAX (307) 234-9438 WEBSITE: http://www.autoelect.com EMAIL: sales@autoelect.com AUTOMATION & ELECTRONICS, INC. CASPER WYOMING		TITLE: ARC POLYMER PLANT MAIN PLC PANEL LAYOUT		CUSTOMER: FABRICATION TECHNOLOGIES INC.	
2		11/19/14		FACTORY AS-BUILT		SMT KM											
1		8/6/14		PARTS REVIEW		CW KM											
0		7/8/14		SHOP AS-BUILT		CG KM											
NO.		DATE		REVISION		BY		DR.									
CAD FILE: D-29895-02-48X36-PL				DATE: 11/19/14				SCALE:		NTS							
SHEET		2		OF		7		DRAWING NUMBER:		D-29895		REV.		2			
JOB NO.:		7103-03_08															



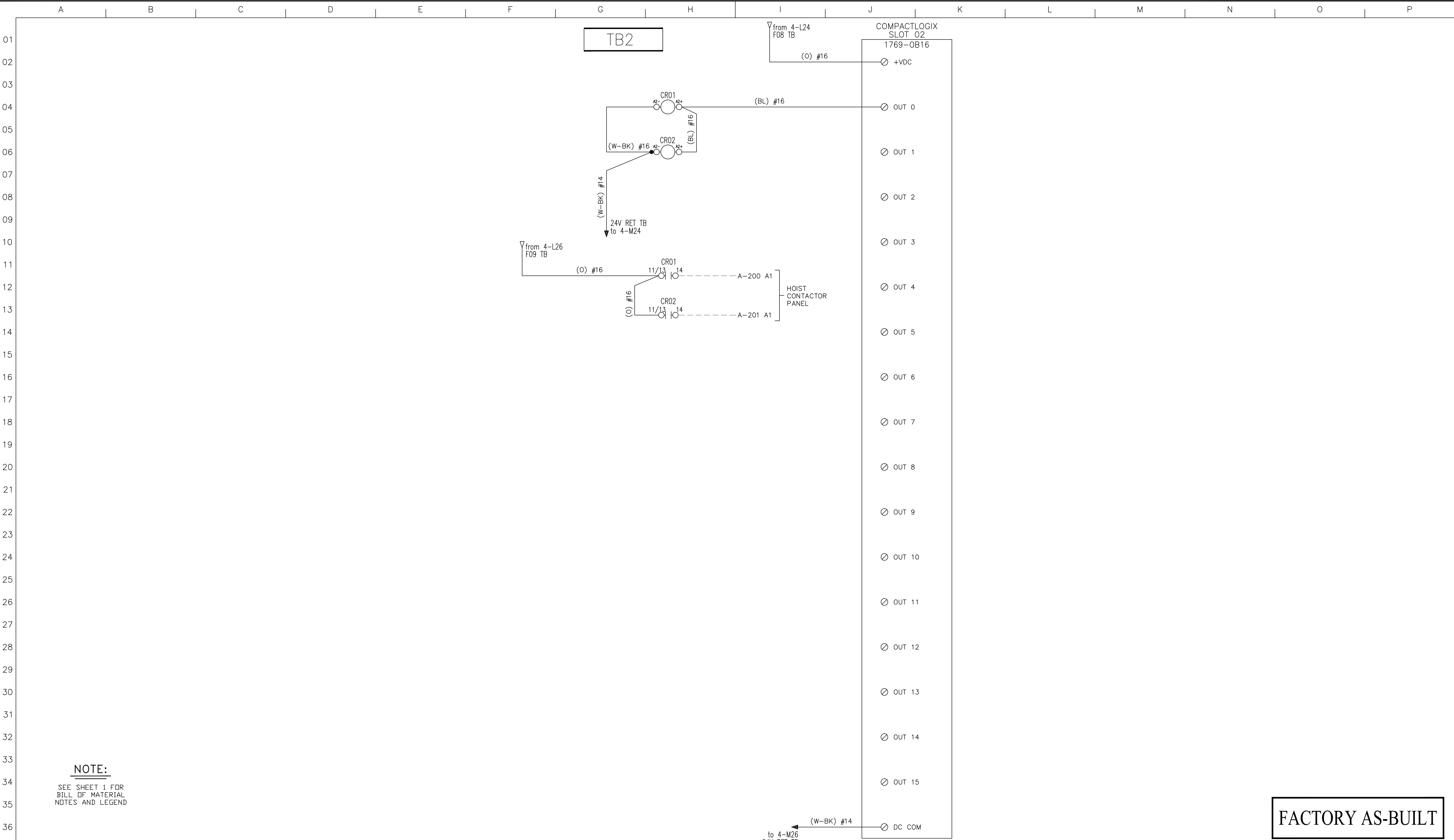
NO.		DATE	REVISION	DESIGNED	DRAFTED	IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY		This drawing is the exclusive property of Automation & Electronics, Inc., and is loaned to the recipient for their confidential use only. As consideration the recipient agrees that it will not be used in any manner detrimental to the interests of Automation & Electronics, Inc., also that it shall be returned upon request, and shall not be reproduced, disposed of, or altered in any way without the written consent of Automation & Electronics, Inc.		PHONE (307) 234-9311 FAX (307) 234-9438 WEBSITE: http://www.autoelect.com EMAIL: sales@autoelect.com		TITLE: ARC POLYMER PLANT MAIN PLC COMMUNICATIONS ARCHITECTURE		CUSTOMER: FABRICATION TECHNOLOGIES INC.	
2		11/19/14	FACTORY AS-BUILT	SMT	KM	P.O. NO.:									
1		8/6/14	PARTS REVIEW	CW	KM										
0		7/8/14	SHOP AS-BUILT	CG	KM										
NO.		DATE	REVISION	BY	DR.	SCALE:								SHEET 3 OF 7	
CAD FILE:		D29895-03-COM		DATE:		11/19/14								DRAWING NUMBER: D-29895	
						NTS								REV. 2	



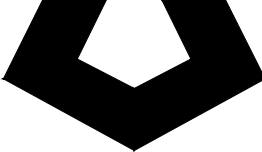
					DESIGNED	DRAFTED	IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY 	This drawing is the exclusive property of Automation & Electronics, Inc., and is loaned to the recipient for their confidential use only. As consideration the recipient agrees that it will not be used in any manner detrimental to the interests of Automation & Electronics, Inc., also that it shall be returned upon request, and shall not be reproduced, disposed of, or altered in any way without the written consent of Automation & Electronics, Inc.	PHONE (307) 234-9311 FAX (307) 234-9438 WEBSITE: http://www.autoelect.com EMAIL: sales@autoelect.com	 AUTOMATION & ELECTRONICS, INC. CASPER WYOMING	TITLE:	CUSTOMER:					
	11/19/14	FACTORY AS-BUILT	SMT	KM	P.O. NO.:	SCALE:					NTS			ARC POLYMER PLANT MAIN PLC POWER	SHEET 4 OF 7	DRAWING NUMBER: D-29895	REV. 2
	8/6/14	PARTS REVIEW	CW	KM													
	7/8/14	SHOP AS-BUILT	CG	KM													
NO.	DATE	REVISION	BY	DR.										JOB NO.:			
CAD FILE: D29895-04 PWR			DATE: 11/19/14											D-29895			2



AUTOMATION & ELECTRONICS, INC.
CASPER, WYOMING



						DESIGNED		DRAFTED		IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY 		This drawing is the exclusive property of Automation & Electronics, Inc., and is loaned to the recipient for their confidential use only. As consideration the recipient agrees that it will not be used in any manner detrimental to the interests of Automation & Electronics, Inc., also that it shall be returned upon request, and shall not be reproduced, disposed of, or altered in any way without the written consent of Automation & Electronics, Inc. PHONE (307) 234-9311 FAX (307) 234-9438 WEBSITE: http://www.autoelect.com EMAIL: sales@autoelect.com		 AUTOMATION & ELECTRONICS, INC. CASPER WYOMING		TITLE: ARC POLYMER PLANT MAIN PLC DIGITAL OUTPUTS		CUSTOMER: FABRICATION TECHNOLOGIES INC.											
2		11/19/14		FACTORY AS-BUILT		SMT		KM														P.O. NO.:		SHEET 6 OF 7		DRAWING NUMBER:		REV. 2	
1		8/6/14		PARTS REVIEW		CW		KM														SCALE:		D-29895					
0		7/8/14		SHOP AS-BUILT		CG		KM														NTS		JOB NO.: 7103-03_08					
CAD FILE: D29895-06-DI				DATE: 11/19/14				BY: DR.																					

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2	11/19/14	FACTORY AS-BUILT		SMT	KM	SMT	KM	P.O. NO.: SCALE: NTS		IF THIS BAR DOES NOT EQUAL ONE INCH ADJUST SCALES ACCORDINGLY	This drawing is the exclusive property of Automation & Electronics, Inc., and is loaned to the recipient for their confidential use only. As consideration the recipient agrees that it will not be used in any manner detrimental to the interests of Automation & Electronics, Inc., also that it shall be returned upon request, and shall not be reproduced, disposed of, or altered in any way without the written consent of Automation & Electronics, Inc.	PHONE (307) 234-9311 FAX (307) 234-9438 WEBSITE: http://www.autoelect.com EMAIL: sales@autoelect.com	 AUTOMATION & ELECTRONICS, INC. CASPER WYOMING	TITLE: ARC POLYMER PLANT MAIN PLC FUSE LIST	CUSTOMER: FABRICATION TECHNOLOGIES INC.	
1	8/6/14	PARTS REVIEW		CW	KM	SHEET 7 OF 7									DRAWING NUMBER: D-29895	REV. 2
0	7/8/14	SHOP AS-BUILT		CG	KM	JOB NO.: 7103-03_08										
NO.		DATE		REVISION		BY	DR.									
CAD FILE: D29895-07-FL				DATE: 11/19/14												