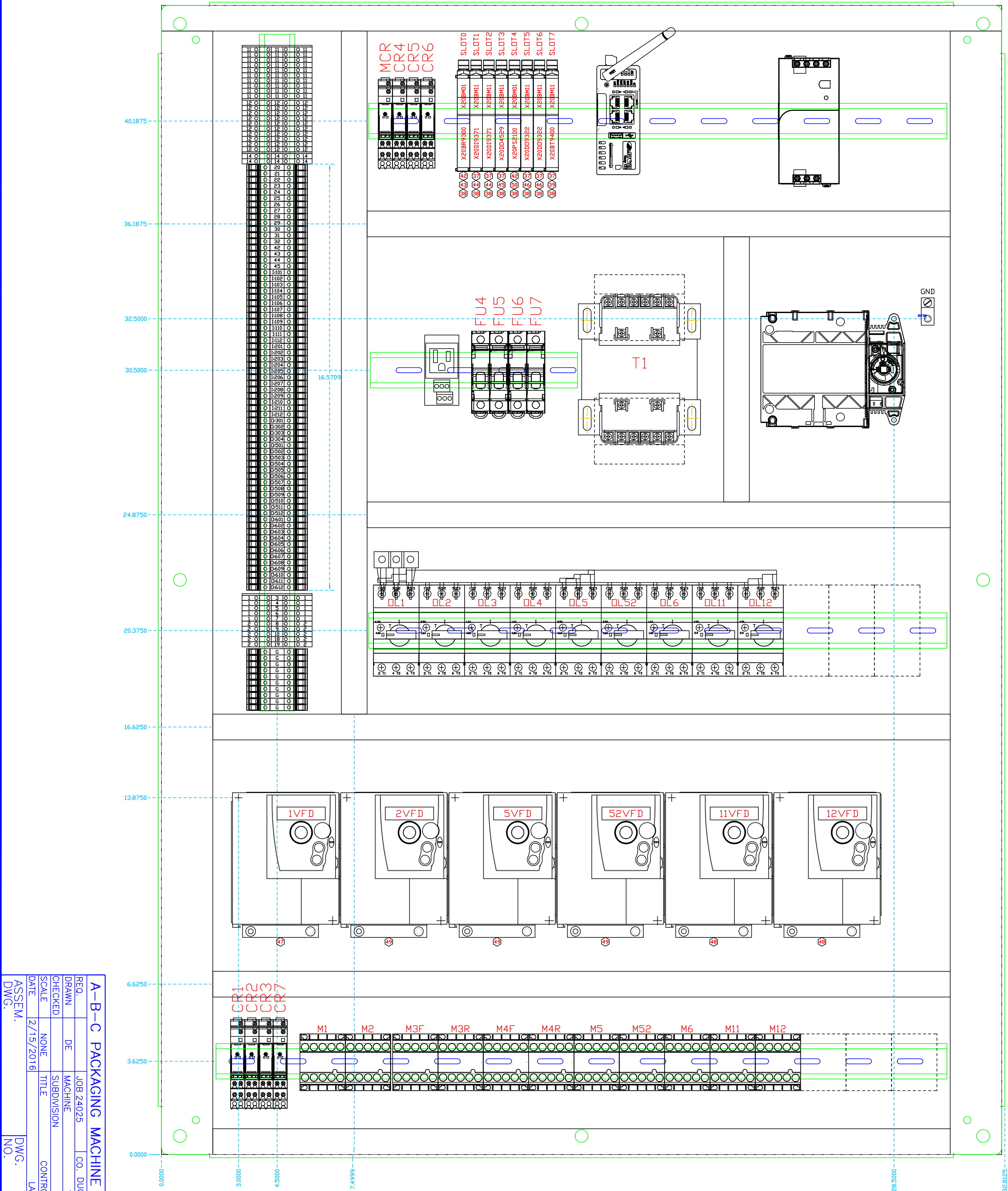


A-B-C PACKAGING MACHINE CORPORATION			
REQ.	JOB 24025	CO. DUCKCHORN WINE CO	
DRAWN	DE	MACHINE	ZZA
CHECKED	SUBDIVISION		
SCALE	NONE	TTT E	CONTROL PANEL
DATE	2/15/2016		LAYOUT
ASSEM.		DWG.	NO. 13D4405



FUSE REPLACEMENT CHART			
FUSE	DESCRIPTION	TYPE	SIZE
FU1	DISCONNECT 1	JTD	35A
FU2	DISCONNECT 3	JTD	35A
FU3	DISCONNECT 1	JTD	35A
FU4	T1 PRIMARY	CC-R	4A
FU5	T1 PRIMARY	CC-R	4A
FU6	T1 SECONDARY	CC-R	3A
FU7	T1 SECONDARY	CC-R	3A
FU8			
FU9			
FU10			

COMPONENTS TORQUE SPECIFICATION			
1	DISCONNECT SWITCH 60A	25in/lb	
2	FUSE BLOCKS	22in/lb	
3	MOTOR PROTECTOR	18-22in/lb	aux term, 8.8-10.3in/lb
4	PLC AND I/O	5in/lb	
5	VFD POWER TERMINALS	16-19in/lb	ctrl term, 4.4-7in/lb
6	TERMINAL BLOCKS	4.5-7.3in/lb	
7	MCR CONTACTOR	40-53in/lb	
8	MOTOR CONTACTORS	13.3-17.7in/lb	
9			

CONTROL PANEL BILL OF MATERIAL						
ITEM	PART NUMBER	QTY	SYMBOL	DESCRIPTION	MANUFACTURER	MANUFACTURER NUMBER
1	P66-1152	1	PB1	PB CONTACT NO	AB	800F-X10
2	P66-122	2	FU2	CLASS CC FUSEHOLDER, 2P, 30A	AB	1492-FB2CD-1
3	P66-1254	1	PB1	PB CONTACT NCLB	AB	800F-X01L
4	P66-1242	1		ESTOP BUTTON, METAL, 22MM, RED	AB	800FM-MT44
5	P66-13155	8	CR, MCR	RELAY, 2PDT, 24VDC, DIODE	AB	700-HLT12224
6	P66-1535	3	OL3,4,6	MOTOR PROTECTOR, 1-1.6A	AB	140M-CZE-816
7	P66-1536	3	OL2,5,2	MOTOR PROTECTOR, 1.6-2.5A	AB	140M-CZE-825
8	P66-1537	2	OL1,1,2	MOTOR PROTECTOR, 2.5-4.0A	AB	140M-CZE-840
9	P66-1538	1	OL1	MOTOR PROTECTOR, 4.0-6.3A	AB	140M-CZE-863
10	P66-1548	9	OL1-12	MOTOR PROTECTOR, FRONT CONTACT	AB	140M-CZE-C11
11	P66-1551	0		3PH COMMON LINK for MCP, 15 FLA	AB	140M-C-WM52N
12	P66-1554	2	OL1-5, 5-11	3PH COMMON LINK for MCP, 15 FLA	AB	140M-C-WM55N
13	P66-1555	1	OL	COMMON LINK LINE TERMINAL	AB	140M-C-WTN
14	P66-1833	2	M3, M4	MECH INTERLOCK for REVERSING 100K	AB	100-KMCH
15	P66-1834	2	M3, M4	POWER WIRING for REVERSING 100K	AB	100-KPR
16	P66-1835	11		CONTACTOR, 3P, 9A, 1NO, 24V ELECTRONIC COIL	AB	100-KD92110
17	P66-20113	1		35MM DIN RAIL	AB	159-DR1
18	P66-20115	1		AC SINGLE OUTLET, NS-15	WEIDMULLER	991548-0000
19	P66-20119	83	TB	SMN TB, 20A, 600V, #12-24AWG, GRAY	AB	1492-J3
20	P66-20120	5	TB	TB END BARRIER for J204	AB	1492-EB15
21	P66-20121	5	TB	TB 10P COMMON JUMPER for 5MM TB	AB	1492-CJ15-10
22	P66-20122	10	TB	TB BLANK MARKER for 5MM TB	AB	1492-MXK12
23	P66-20124	32	TB	SMN DO TB, 20A, 600V, #12-24AWG, GRAY	AB	1492-JD3
24	P66-20125	5	TB	TB END BARRIER for JD3	AB	1492-EBD3
25	P66-20132	10	TB	SMN END TERMINAL, #10-32, GREEN	AB	1492-J54
26	P66-25029	1	DISC1	DISCONNECT SHAFT, 1.2INCH	AB	1948-N1
27	P66-2559	1	DISC1	N4 ROTARY DISCONNECT HANDLE, BLACK	AB	1948-P8
28	P66-2567	1	DISC1	1P DISC SWITCH, OPEN, 60A, TYPE J FUSE	AB	1948-J60-17355
29	P66-2881	1		METAL PB MOUNTING LATCH	AB	800F-ALM
30	P66-3740	1	T1	SOVA CONTROL TRANSFORMER	HAMMOND	PH1500MOM1
31	P66-3782	2	T1	TRANSFORMER TOUCH SAFE COVER	AB	1564
32	P66-3806	1	PS1	240V 24V POWER SUPPLY	PULS	CS10-241
33	P66-3915	2	FU4, FU5	CLASS CC FUSE, 4A, 600V, TIME DELAY	AB	COMR-4
34	P66-4046	2	FU6, FU7	CLASS CC FUSE, 3A, 600V, TIME DELAY	AB	COMR-3
35	P66-4233	1		R45 BULKHEAD CONNECTOR, JDS	CUTLER HAMMER	M22-R45-5A
36	P66-4026	3	FU1-3	CLASS J FUSE, 35A, 600V, TIME DELAY	AB	LITTELFUSE JDS35
37	P66-5276	6	X20 IO	X20 BUS MODULE, 24V CODED	B & R	X20BM11
38	P66-5277	8	X20 IO	X20 TERMINAL BLOCK, 12PT, 24V CODED	B & R	X20TB12
39	P66-5280	1	X20 IO	X20 BUS TRANSMITTER, X2X LINK	B & R	X20BT4000
40	P66-5399	1		ETHERNET VPN ROUTER	hWON	CS05-131
41						
42	P66-5379	1	X20 IO	X20 BUS RECEIVER, X2X LINK	B & R	X20BR3000
43	P66-5380	2	X20 IO	X20 SUPPLY BUS MODULE	B & R	X20BM01
44	P66-5381	2	X20 IO	12PT X20 DC INPUT, 24V SINK	B & R	X20D0371
45	P66-5382	1	X20 IO	4PT X20 RELAY OUTPUT, 12VDC	B & R	X20D04529
46	P66-5383	2	X20 IO	4PT X20 RELAY OUTPUT, 24V, 5A SOURCE	B & R	X20D03922
47	P66-5386	1	1VFD	ACOPUS X64 VFD, 2HP, 380-500V, X2X LINK	B & R	8164T400150.00K-1
48	P66-5387	2	2VFD	ACOPUS X64 VFD, 1HP, 380-500V, X2X LINK	B & R	8164T400075.00K-1
49	P66-5388	3	5VFD	ACOPUS X64 VFD, 3/4HP, 380-500V, X2X LINK	B & R	8164T400055.00K-1
50	P66-5389	1	X20 IO	X20 SUPPLY BUS MODULE	B & R	X20P2100
51	P75-4223	1		CONDUCTIVE PANEL for 4830S ENCLOSURE	SAGINAW	SCE-48P36GALV
52	P75-4329	1		TYPE 12 ENCLOSURE, 48x36x8	SAGINAW	SCE-48P136BLP
53	P75-776	16		1/4" WIREDUCT, GRAY	HELLERMAN-TYTON	184-14002
54	P75-4371	16		1" WIREDUCT COVER, GRAY	HELLERMAN-TYTON	181-91004
55	P75-4364	7		2 1/4" WIREDUCT, GRAY	HELLERMAN-TYTON	184-24004
56	P75-4370	7		2" WIREDUCT COVER, GRAY	HELLERMAN-TYTON	181-92005
57	P83-672	1		LEGEND PLATE, "EMERGENCY STOP"	AB	800F-15VSE112
58						

EXTERNAL BILL OF MATERIAL						
ITEM	PART NUMBER	QTY	SYMBOL	DESCRIPTION	MANUFACTURER	MANUFACTURER NUMBER
59	P66-1152	3	PB1	PB CONTACT NO	AB	800F-X10
60	P66-1242	3	PB2,3,4	ESTOP BUTTON, METAL, 22MM, RED	AB	800FM-MT44
61	P66-1254	3	PB2,3,4	PB CONTACT NCLB	AB	800F-X01L
62	P66-2601	2	LS7, 8	LIMIT SWITCH	AB	802T-AP
63	P66-2703	4	OS	NON-CONTACT SAFETY SWITCH 2NC, 1NO	AB	840N-2231WPH
64	P66-2706	4	OS	FEMALE SAFETY CORSET, 3P, M12, 10M	AB	889D-F8AB-10
65	P66-2797	8	P85-34	W2 PROX 18MM FLUSH 8MM RANGE, 10-30V, 23W	EFFECTOR	IGS208
66	P66-2798	4	P81-4	W2 PROX 18MM EXTENDED 12MM RANGE, 10-30V, 23W	EFFECTOR	IGS209
67	P66-2881	3		METAL PB MOUNTING LATCH	AB	800F-ALM
68						
69	P66-3113	1	APS	DIGITAL AIR PRESSURE SWITCH, 10-30V, 6W	EFFECTOR	P65224
70	P66-3231	2	LS7, 8	LIMIT SWITCH ADJ. WIDE ROLLER	AB	802T-W2D
71	P66-4247	50FT	X2X	X2X LINK CABLE	B&R	X67CA0X99-1000
72	P66-4248	3	X67	M2 X2X LINK ATTACHMENT CABLE	B&R	X67CA0X21-0150
73	P66-4249	17	M8	MM MALE SCREW TERMINAL ATTACHMENT PLUG	MUUR	7000-08641-000-0000
74	P66-500	2	EE2, EE8	3" ROUND REFLECTOR	ATC	70021001.0000
75	P66-5237	1	HMM/PLC	PPC CONNECTOR, 3P, 24V POWER	B & R	0TB6102-2010-01
76	P66-5377	1	HMM/PLC	PPC CONNECTOR, 4P, X2X LINK	B & R	0PPC70-1010-20W
77	P66-5378	1	HMM/PLC	M2 MIXED MODULE, 16PT	B & R	0TB5104-2010-01
78	P66-5384	1	S82A	MR 24V SINK IN, SOURCE OUT	B&R	X67DM1321-108
79	P66-5385	4	S82B, S83	MR 24V SINK IN, SOURCE OUT	B&R	X67DM1321
80	P66-6922	1	EE1	CORNER CUBE REFLECTOR	OMRON	E3931
81	P66-6931	0	EE7	PHOTOEYE, 18MM POLARIZED REFLECTIVE OD, 10-30V, 6W	EFFECTOR	0D7500
82	P66-6932	0	EE7	18MM SENSOR MOUNTING BRACKET	EFFECTOR	E20729
83	P66-6957	3	EE1, 2, 8	PHOTOEYE, 18MM POLARIZED REF OD, 10-30V, 5W	EFFECTOR	0G5000
84	P66-6966	18	EE, FR	QD CABLE-MICRO 4W, 10M LG, 90 DEG	EFFECTOR	EVC006
85	P66-6967	1	SO10	QD CABLE-MICRO 4W, 10M LG, STRAIGHT	EFFECTOR	EVC003
86	P66-6971	1	SO10	QD CABLE DIN 43650 TYPE B, M12, 4M	EFFECTOR	E11432
87	P66-4251	4	X67	QUICK DISC M12 CONNECTOR MALE, 8 CODED	B&R	X67AC2001
88	P66-7080	2	EE12, 16	OS SERIES EYE 50-1800MM DIFFUSE, 10-30V, 6W	EFFECTOR	0YH500
89	P66-7081	2	EE12, 16	OS SERIES EYE BRACKET	EFFECTOR	E21083
90	P66-7166	1	LC	30MM RESOLUTION QD LIGHT CURTAIN, 910MM, 24V	KEYENCE	GL-R24L
91	P66-7167	2	LC	GL LIGHT CURTAIN L BRACKET, 2 PIER MNG	KEYENCE	GL-R812
92	P66-7172	2	LC	PNP LIGHT CURTAIN CABLE, 5P, 10M	KEYENCE	GL-RP10P
93	P66-7174	2	LS7,LS8	MR STRAIGHT CONNECTION CABLE, 3 COND, 10M, QD	EFFECTOR	LV1277
94	P66-7175	14		QD VALVE PLUG M12 MALE FORM 1M	MUUR	7000-42081-000-0000
95	P66-7176	14		QD MR MALE M12 FEMALE PATCH CABLE, 1M	MUUR	7000-88241-210-0100
96	P66-7177	4	X67	X67 I/O SUPPLY CABLE, 10M	B&R	X67CA0P20-0100
97	P66-852	1		STACK LIGHT TUBE/BASE/CAP RED CONSTANT BEACON LED 24V, 1.1W	AB	855T-8PM25C
98	P66-863	1	LT1	AMBER CONSTANT BEACON LED, 24V, 1.1W	AB	855T-R24TL3
99	P66-864	0	LT3	GREEN CONSTANT BEACON LED, 24V, 1.1W	AB	855T-R24TL5
100	P66-865	1	LT2	RED CONSTANT BEACON LED, 24V, 1.1W	AB	855T-R24TL3
101	P66-947	2	P82,P83	12MM PB ENCLOSURE, 1 HOLE, N12	SAGINAW	SCE-1PB0X
102	P66-948	0		12MM PB ENCLOSURE, 2 HOLE, N12	SAGINAW	SCE-2PB0X
103	P75-4133	0		J BOX, N12, 108X, SCREW COVER	SAGINAW	SCE-1008SC
104	P75-4138	2		J BOX, N12, 69X4, CLAMP COVER	SAGINAW	SCE-406CHNF
105	P75-4143	2		J BOX, N12, 12X10, CLAMP COVER	SAGINAW	SCE-1210CHNF
106	P75-4193	1		J BOX, N12, 89X, SCREW COVER	SAGINAW	SCE-806SC
107	P81-1066	0		CUSTOM LEGEND "RUN/LOAD"	AB	800F-12WE1005
108	P81-672	3		LEGEND PLATE, "EMERGENCY STOP"	AB	800F-15VSE112
109	P66-4253	1	S82A,2B	X67 X2X LINK CONNECTION CABLE, 1.0M	B&R	X67CA0X01-0050
110	P66-4304	1	S82A,2B	X67 X2X I/O POWER CABLE, 1.0 M	B&R	X67CA0P00-0010
111	P66-5428	1		MR BLANKING PLUG, 50 PRICE	B&R	X67AC0M08
112						
113						
114						
115						

DRAWING LIST	
1304402	POWER CIRCUIT WIRING
1304403	PANEL CONTROL WIRING
1304404	MACHINE X67 IO
1304405	PANEL LAYOUT / BOM
1304406	NETWORK WIRING
1402157	AIR PIPING
758124	HMI ENCLOSURE CUTOUT

A-B-C NAMEPLATE INFO  
460V 60HZ 3PH  
25A FULL LOAD  
65KA SHORT CIRCUIT RATING  
35A MAXIMUM FUSE  
ELECTRICAL DWG #13D4219  
3.4 FLA LARGEST MOTOR