

TITLE	ASSEMBLY, MAIN ENERGY SWITCH
ASSEMBLY NUMBER	1716-020
REVISION	X0
NEXT ASSEMBLY	-

BILL OF MATERIALS						
ITEM	QTY PER SYSTEM	UNIT OF MEASURE	PART NUMBER	DESCRIPTION	VENDOR	NOTES
1						
2	1	EA	G07C0000	MONITOR, TOUCH SCREEN	RED LION	
3	1	EA	S2	SWITCH, CONTACT BLOCK, NO, PANEL MOUNT, SILVER, 22 mm	ALTECH CORP	
4	1	EA	2AMPP4	E-STOP OPERATOR, 22mm	ALTECH CORP	
5	1	EA	S1	SWITCH, CONTACT BLOCK, NO, PANEL MOUNT, SILVER, 22 mm	ALTECH CORP	
6	1	EA	8106.235	SIDEWALL, PAIR	RITTAL	
7	1	EA	8806.500	ENCLOSURE, BASIC	RITTAL	
8	1	EA	8800.110	HINGE	RITTAL	
9	2	EA	8612.400	BRACKET, PAC OF 4	RITTAL	
10	3	EA	7166.735	SHELF	RITTAL	
11	1	EA	8801.320	ROOF, WITH CUTOUT	RITTAL	
12	2	EA	3243.200	OUTLET FILTER	RITTAL	
13	1	EA	3149.810	PAGODA FAN	RITTAL	
14	2	EA	8612.680	BAR, PAC OF 2	RITTAL	
15	9	EA	8612.080	MOUNTING, PAC OF 4	RITTAL	
16	2	EA	4376.000	SYSTEM CHASSIS, PAC OF 4	RITTAL	
17	8	EA	4179.000	NUT, PAC OF 20	RITTAL	
18	4	EA	4183.000	BRACKET, PAC OF 24	RITTAL	
19	1	EA	4163.000	BLOCK PAC OF 50	RITTAL	
20	1	EA	4165.000	NUTS, PAC OF 50	RITTAL	
21	1	EA	2486.500	SCREW, PAC OF 300	RITTAL	
22	1	EA	2504.800	SCREW, PAC OF 300	RITTAL	
23	1	EA	2504.500	SCREW, PAC OF 300	RITTAL	
24	4	EA	2445T42	LEVELING FOOT	McMASTER CARR	
25	10	EA	8507K65	RUBBER EDGE TRIM	MCMaster CARR	
26	2	EA	91770A827	SCREW 10-32 X 3/8	MCMaster CARR	
27	20	EA	92319A658	NYLON 6-32 STANDOFF	MCMaster CARR	
28	1	EA	92141A008	#6 FLAT WASHER	MCMaster CARR	
29	1	EA	93135A305	SCREW 6-32 X 1/2	MCMaster CARR	
30	15	EA	91780249	HEX STANDOFF	MCMaster CARR	
31	1	EA	91772A829	SCREW 10-32 X 1/2	MCMaster CARR	
32	1	EA	92141A011	#10 FLAT WASHER	MCMaster CARR	
33	1	EA	92146A550	#10 LOCKWASHER	MCMaster CARR	
34	1	EA	94735A263	NYLON 6-32 X 3/8	MCMaster CARR	
35	1	EA	90243A719	NYLON RIVET	MCMaster CARR	
36	1	EA	90243A719	NYLON RIVET	MCMaster CARR	
37	1	EA	90243A739	NYLON RIVET	MCMaster CARR	
38	1	EA	90243A739	NYLON RIVET	MCMaster CARR	
39	4	EA	90221A416	NYLON RIVET	MCMaster CARR	
40	4	EA	90221A416	NYLON RIVET	MCMaster CARR	
41	1	EA	90243A719	NYLON RIVET	MCMaster CARR	
42	5	EA	90221A416	NYLON RIVET	MCMaster CARR	
43	1	EA	1529T22	MODULAR DISTRIBUTION BAR	MCMaster CARR	
44	1	EA	1529T21	MODULAR DISTRIBUTION BAR	MCMaster CARR	
45	1	EA	1529T31	SURFACE MOUNT BRACKET	MCMaster CARR	
46	1	EA	1529T32	DIN-RAIL MOUNT BRACKET	MCMaster CARR	
47	2	EA	1529T13	TERMINAL BLOCK	MCMaster CARR	
48	2	EA	1529T12	TERMINAL BLOCK	MCMaster CARR	
49	4	EA	1529T11	TERMINAL BLOCK	MCMaster CARR	
50	4	EA	T1-1022	PVC DUCT 1 X 2.25	MCMaster CARR	
51	3	EA	T1-1522	PVC DUCT 1.5 X 2.25	MCMaster CARR	
52	33	EA	DN-EB35	DiNector END BRACKET, box of 50	MCMaster CARR	
53	1	EA	EGSX200A	TRANSFER SWITCH	EATON	
54	1	EA	PS-CDI-030	RELAY SIDE PANEL	CONCURRENT DESIGN INC	

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55	6	EA	PS-CDI-027	BATTERY MOUNTING	CONCURRENT DESIGN INC	
56	2	EA	PS-CDI-029	INVERTER BRACKET	CONCURRENT DESIGN INC	
57	2	EA	PS-CDI-032	MAIN PANEL MOUNTING	CONCURRENT DESIGN INC	
58	1	EA	PS-CDI-033MOD	DOOR FRONT	CONCURRENT DESIGN INC	
59	2	EA	PS-CDI034MOD	COVER SIDE	CONCURRENT DESIGN INC	
60	1	EA	PS-CDI-028	PANEL	CONCURRENT DESIGN INC	
61	1	EA	PS-CDI-035	FRAME	CONCURRENT DESIGN INC	
62	1	EA	18X18X4	SCREW COVER JUNCTION BOX	MCMaster CARR	
63	1	EA	PS-CDI-036	REAR COVER	CONCURRENT DESIGN INC	
64	2	EA	PS-CDI-037	REAR COVER	CONCURRENT DESIGN INC	
65	1	EA	PS-CDI-038	REAR COVER	CONCURRENT DESIGN INC	
66	2	EA	92670A751	ELEVATOR BOLT, PAC OF 25	MCMaster CARR	
67	1	EA	69915K51	CORD GRIP	MCMaster CARR	
68	1	EA	70169450	BUSBAR	ALLIED	
69	6	EA	70169451	BUSBAR SUPPORT	ALLIED	
70	12	EA	70169453	TERMINAL BUSBAR	ALLIED	
71	20	EA	A34215-ND	CONNECTOR, PLUG, 2 POS FOR CT MOD	DIGIKEY	
72	20	EA	A34186-ND	CONNECTOR, RECPT, 2 POS FOR CT MOD	DIGIKEY	
73	1	EA	69915K51	CORD GRIP	MCMaster CARR	
74	300	FT	173156	Wire, TP, RED/WHT, 1000 ft SPOOL	JAMECO	
75	20	EA	91772A820	1-3/8 ", #10 SCREW, BOX OF 50	MCMaster CARR	
76	6	EA	92510A749	ALUMINUM SPACER	MCMaster CARR	
77	2	EA	8026K76	CONNECTOR KIT	MCMaster CARR	
78	60	EA	90380A106	4-20 X 1/4 THREAD FORMING SCREW, ZINC, PAC OF 100	MCMaster CARR	
79	1	EA	70082984	CONNECTOR	ALLIED	
80	1	EA	70082939	CONNECTOR	ALLIED	
81	1	EA	70042388	CLAMP	ALLIED	
82	1	EA	70082898	CONTACT	ALLIED	
83	2	EA	70042595	CONTACT	ALLIED	
84	2	EA	70042280	CONTACT	ALLIED	
85	20	EA	7017049	RAIL ADAPTER	ALLIED	
86						
87						
88						
89						
90						
91						
92	1	EA	1716-021	SARM	CONCURRENT DESIGN INC	SUBASSEMBLY
93	1	EA	1716-022	INVERTER	CONCURRENT DESIGN INC	SUBASSEMBLY
94	1	EA	1716-023	SIDE RELAYS	CONCURRENT DESIGN INC	SUBASSEMBLY
95	1	EA	1716-024	DC BUS	CONCURRENT DESIGN INC	SUBASSEMBLY
96						
97	1	BAG	2622.0/100 / 70078400	FERRULE	ALLIED	SYSTEM LEVEL WIRING
98	1	BAG	2399.0 / 70078404	FERRULE	ALLIED	SYSTEM LEVEL WIRING
99	1	BAG	2397.0/100 / 70078402	FERRULE	ALLIED	SYSTEM LEVEL WIRING
100	1	SPOOL	9421 060100 / 70005043	WIRE	ALLIED	SYSTEM LEVEL WIRING
101	1	EA	LPJ-100SP / 70150172	FUSE	ALLIED	SYSTEM LEVEL WIRING
102	5	EA	PX 3214259	UT2 5 -3L MULTI LEVEL TERMINAL BLOCK	AWC	SYSTEM LEVEL WIRING
103	25	EA	PX 3044076	UT 2 5 FEED THROUGH TERMINAL BLOCK	AWC	SYSTEM LEVEL WIRING
104	12	EA	PX 3047028	D UT 2 5/10 END COVER L 47.7 W 2	AWC	SYSTEM LEVEL WIRING
105	4	EA	PX 3030271	FBS 10-6 PLUG IN BRIDGE POSTIONS 10	AWC	SYSTEM LEVEL WIRING
106	130	FT	EG WIMTW18STRBLU500	WIRE 1/C MTW #18 AWG STR BLUE 500' REEL	AWC	SYSTEM LEVEL WIRING
107	1	BAG	2204.0/100	FERRULE 16AWG	ALLIED	SYSTEM LEVEL WIRING
108	1	BAG	2212.0	FERRULE 8 AWG	ALLIED	SYSTEM LEVEL WIRING

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109	1	BAG	2213.0/100	FERRULE 8 AWG	ALLIED	SYSTEM LEVEL WIRING
110	1	EA	PTL-11-427	BRADY LABEL	ALLIED	SYSTEM LEVEL WIRING
111	1	EA	M71-11-427	BRADY LABEL	ALLIED	SYSTEM LEVEL WIRING
112	1	EA	M21-500-423	BRADY CART M21	ALLIED	SYSTEM LEVEL WIRING
113	1	EA	DG909MF2	ANGLE ADAPTER DB9 MALE/FEMALE	ALLIED	SYSTEM LEVEL WIRING
114	8	EA	3214259	PHOENIX CONN TERMBLK DIN RAIL	ALLIED	SYSTEM LEVEL WIRING
115	2	EA	3214314	PHOENIX CONN TERMBLK END CVR	ALLIED	SYSTEM LEVEL WIRING
116	3	EA	3044199	PHOENIX CONN TERM BLK FEED THRY	ALLIED	SYSTEM LEVEL WIRING
117	2	EA	3005950	PHOENIX CONN BRIDGE PLUG IN RED	ALLIED	SYSTEM LEVEL WIRING
118	1	EA	3047028	PHOENIX COVER TERM BLK GRAY	ALLIED	SYSTEM LEVEL WIRING
119	1	EA	M71-R4300	BRADY BMP71 R4300 BLK RIBBON	ALLIED	SYSTEM LEVEL WIRING
120	1	EA	M71-11-427	BRADY LABEL	ALLIED	SYSTEM LEVEL WIRING
121	20	EA	1201578	PHOENIX CONTACT RAIL ADAPTER	ALLIED	SYSTEM LEVEL WIRING
122	1	EA	2315272	PHOENIX INTERFACE MODULE VARIOFACE	ALLIED	SYSTEM LEVEL WIRING
123	4	BAG	54109 / 70093047	LUG ONE HOLE 3/8	ALLIED	SYSTEM LEVEL WIRING
124	3	BAG	5412-TB / 70093039	LUG ONE HOLE 5/16	ALLIED	SYSTEM LEVEL WIRING
125	2	BAG	54143-TB / 70093040	LUG ONE HOLE 3/8	ALLIED	SYSTEM LEVEL WIRING
126	1	BAG	2620.0/100 / 70078398	FERRULE 24 AWG	ALLIED	SYSTEM LEVEL WIRING
127	1	BAG	2623.0/100 / 70078401	FERRULE 22 AWG	ALLIED	SYSTEM LEVEL WIRING
128	1	BAG	2213.0/100 / 70078414	FERRULE 8 AWG	ALLIED	SYSTEM LEVEL WIRING
129	8	EA	54109 / 70093047	LUG ONE HOLE 3/8 PINK	ALLIED	SYSTEM LEVEL WIRING
130	3	EA	54153-TB / 70093046	LUG ONE HOLE 5/15	ALLIED	SYSTEM LEVEL WIRING
131	7	EA	3044199 / 70170126	CONN TERM BLK FEED THRU	ALLIED	SYSTEM LEVEL WIRING
132	2	EA	3044212 / 70170168	CONN TERM BLK DIN RAIL GROUND SCRW	ALLIED	SYSTEM LEVEL WIRING
133	3	EA	3005950 / 70169293	BRIDGE PLUG IN RED	ALLIED	SYSTEM LEVEL WIRING
134	4	EA	SJ25-07LW / 70229908	SOCKET RELAY DPDT	ALLIED	SYSTEM LEVEL WIRING
135	4	EA	RJ25-CLD-D24 / 70173101	RELAY E-MECH DPDT 24 VDC	ALLIED	SYSTEM LEVEL WIRING
136	30	FT	9874T17	MACHINE TOOL WIRE 6 GA BLACK 100FT	MCMMASTER-CARR	SYSTEM LEVEL WIRING
137						

TITLE	ASSEMBLY, SARM
ASSEMBLY NUMBER	1716-021
REVISION	X0
NEXT ASSEMBLY	1716-020

BILL OF MATERIALS						
ITEM	QTY PER SYSTEM	UNIT OF MEASURE	PART NUMBER	DESCRIPTION	VENDOR	NOTES
1	2	EA	VIP-2-SC-FLK16	VARIOFACE PROFESSIONAL, RIB CABLE CONN. 16 POS	PHOENIX CONTACT	
2	20	EA	SCT-0400-050	CURRENT TRANSFORMER, 50A TO 0.333V	MAGNELAB	
3	8	EA	SCT-0400-050	CURRENT TRANSFORMER, 100A TO 0.333V	MAGNELAB	
4	1	EA		PC BOARD, SARM POWER SUPPLY	MacroFab	
5	1	EA		PC BOARD ASM, SARM CONTROLLER BOARD	MacroFab	
6	1	EA		PC BOARD, SARM REMOTE CURRENT INTERFACE	MacroFab	
7	1	EA		PC BOARD ASM, SARM VOLTAGE MONITOR BOARD	MacroFab	
8	5	EA		PC BOARD ASM, SARM RELAY BOARD	MacroFab	
9	5	EA		PC BOARD, SARM LOCAL CURRENT INTERFACE	MacroFab	
10	2	EA	70170054	INTERFACE MODULE	PHOENIX CONTACT	
11	3	EA	70169109	DIN RAIL, 2 METER	PHOENIX CONTACT	
12	3	EA	SAM8734-ND	CABLE	DIGIKEY	
13	1	EA	377-1119-ND	PLASTIC ENCLOSURE	DIGIKEY	
14	4	EA	576-021800.HXP	FUSE	MOUSER	
15	9	EA	576-65900000009	FUSE HOLDER ACC.	MOUSER	
16	8	EA	576-0217.100MXP	FUSE	MOUSER	
17	1		SAM8734-ND	CABLE	DIGIKEY	FOR SARM BOARDS MODIFICATIONS
18	1		377-1119-ND	PLASTIC ENCLOSURE	DIGIKEY	FOR SARM BOARDS MODIFICATIONS
19	1		576-021800.HXP	FUSE	MOUSER	FOR SARM BOARDS MODIFICATIONS
20	1		576-65900000009	FUSE HOLDER ACC.	MOUSER	FOR SARM BOARDS MODIFICATIONS
21	1		576-0217.100MXP	FUSE	MOUSER	FOR SARM BOARDS MODIFICATIONS
22						

TITLE	ASSEMBLY, INVERTERS
ASSEMBLY NUMBER	1716-022
REVISION	X0
NEXT ASSEMBLY	1716-020

BILL OF MATERIALS						
ITEM	QTY PER SYSTEM	UNIT OF MEASURE	PART NUMBER	DESCRIPTION	VENDOR	NOTES
1	1	EA	865-1058	CONEXT COMBOX-COMMUNICATION DEVICE	SCHNEIDER ELECTRIC	
2	1	EA	XANTREX XW+, 6848NA	INVERTER/CHARGER, HYBRID	SCHNEIDER ELECTRIC	
3	1	EA	XANTREX XW+, 6848NA	INVERTER/CHARGER, HYBRID	SCHNEIDER ELECTRIC	
4						
5						

TITLE	ASSEMBLY, SIDE-RELAYS
ASSEMBLY NUMBER	1716-023
REVISION	X0
NEXT ASSEMBLY	1716-020

PROJECT BILL OF MATERIALS						
ITEM	QTY PER SYSTEM	UNIT OF MEASURE	PART NUMBER	DESCRIPTION	VENDOR	NOTES
1	4	EA	AF45-22-00-70-ABBG	CONTACTOR 65A 100-250 VAC Coil	ABB	
2	5	EA	RA5-1	INTERFACE RELAY 24VDC	ABB	
3	1	EA	AF75-22-00-72-ABBG	CONTACTOR 105A 20-60VDC Coil	ABB	
4	4	EA	LD75	TERMINAL	ABB	
5	25	EA	389FXBXC-24V	POWER RELAY	SCHNEIDER ELECTRIC	
6	25	EA	70-788EL11-1	SOCKET, RELAY, DIN RAIL MOUNT	SCHNEIDER ELECTRIC	
7	25	EA	70-ASSM-24	MOV	SCHNEIDER ELECTRIC	
8	2	EA	QOU2100	Miniature Breaker, 120/240V, 2 Pole , 100A	Square-D	
9	3	EA	QOU260	Miniature Breaker, 120/240V, 2 Pole , 60A	Square-D	
10	1	EA	QOU240	Miniature Breaker, 120/240V, 2 Pole , 40A	Square-D	
11	1	EA	QOU210	Miniature Breaker, 120/240V, 2 Pole , 10A	Square-D	
12	2	EA	QOU210	Miniature Breaker, 120/240V, 2 Pole , 10A	Square-D	
13	30	EA	QOULFSC1	1 Pole, Fingersafe Cover	Square-D	
14	8	EA	QOUHFSC1	1 Pole, Fingersafe Cover	Square-D	
15						

TITLE	ASSEMBLY, DC_BUS
ASSEMBLY NUMBER	1716-024
REVISION	X0
NEXT ASSEMBLY	1716-020

BILL OF MATERIALS						
ITEM	QTY PER SYSTEM	UNIT OF MEASURE	PART NUMBER	DESCRIPTION	VENDOR	NOTES
1	2		W-162012	BUSBAR, STD FLT COPPER, 20 X 5 X 300mm	WOHNER	
2	6		W-1285	TERMINAL, UNIVERSAL CONDUCTOR, 270A, 12-2 ga	WOHNER	
3	4		W-1287	TERMINAL, UNIVERSAL CONDUCTOR, 400A, 6-2/0 ga	WOHNER	
4	1		W-1244	COVER, BUSBAR	WOHNER	
5	1		W-1244	COVER, BUSBAR	WOHNER	
6	1		W-01515	BASEPLATE, INSULATOR	WOHNER	
7	2		W-01508	SUPPORT, BUSBAR, 3-POLE	WOHNER	
8	2		31295	FUSE HOLDER, 30A, CLASS CC	WOHNER	
9	1		CD5.242	DC-DC CONVERTER	PULS POWER	
10	1		EV200AAANA	RELAY, CZONKA III	TYCO	
11	1		MNEDC175	CIRCUIT BREAKER, 175A	MIDNITE SOLAR	
12	2		MNEDC250	CIRCUIT BREAKER, 250A	MIDNITE SOLAR	
13	1		019-030	8 OHM NON INDUCTIVE RESISTOR	MCMMASTER	
14						
15						