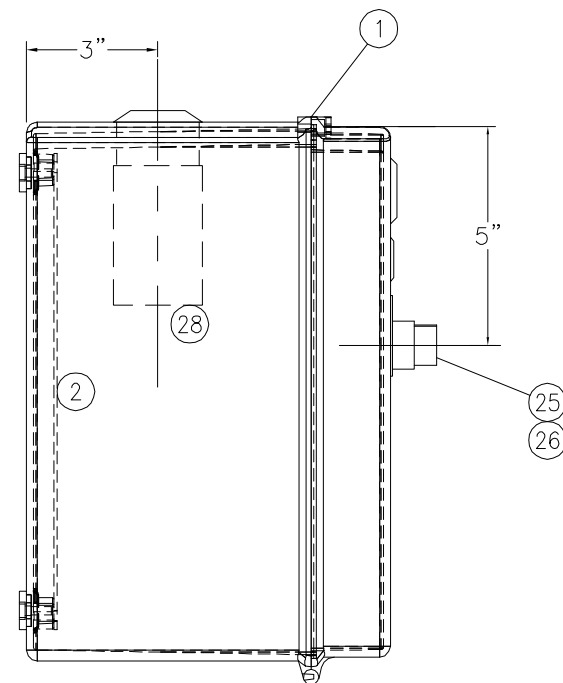
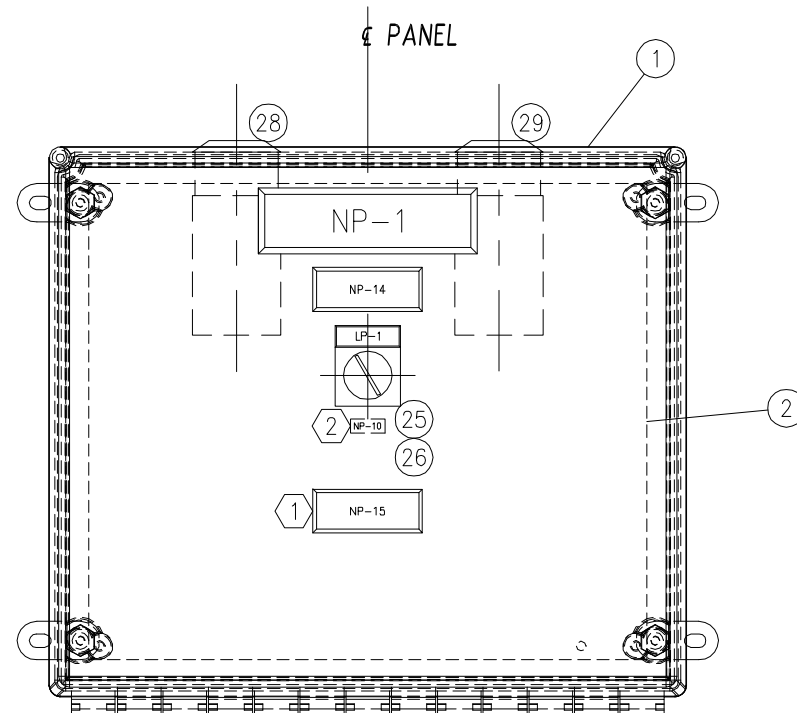


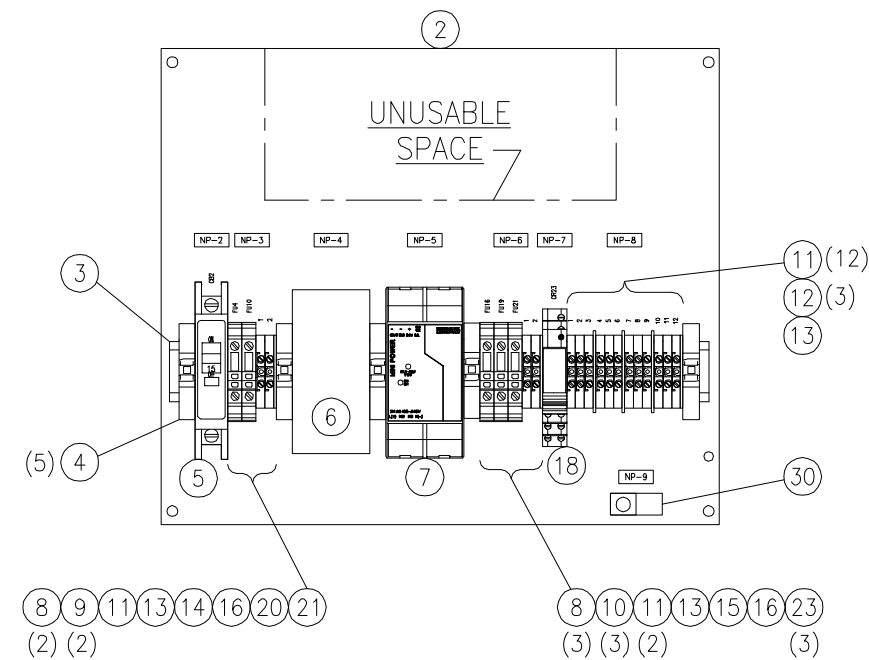
PANEL TOP VIEW



PANEL SIDE VIEW




4 PANEL FRONT VIEW
12.00"H x 14.00"W x 8.00"D
NEMA 4X FIBERGLASS ENCL.



PANEL SUB-PLATE
10.88"H x 12.75"W

SHEET NOTES:

SEE SHEET PC-336AM.1.3 FOR DRAWING NOTES.

REV. NO.	DATE	DESCRIPTION	FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202 TELEPHONE (513)241-5640 WWW.FHENG.COM		 JIMMY HUNTINGTON BUILDING 714 FOURTH AVENUE, SUITE 201 FAIRBANKS, ALASKA 99701 TELEPHONE (907) 455-1500 FAX (907) 455-6788	Date: 20 APR 2010 Scale: NTS Designed By: LG Drawn By: AJJ Checked By: JET		UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-336AM PANEL LAYOUT FORT WAINWRIGHT, AK. DU PROJECT NO. J101395, 101396, 101397		Drawing No. PC-336AM.1.1	
04/21/10	ISSUED FOR REVIEW										

BILL OF MATERIALS						
ITEM #	QTY.	UNIT	MANUFACTURER	CATALOG #	DESCRIPTION	SUPPLIED BY (SEE LEGEND)
1	1	EA	HOFFMAN	A14128CHQRFG	CONTINUOUS HINGE, NEMA TYPE 4X ENCL., NON-METALLIC FIBERGLASS W/QUICK RELEASE LATCHING DOOR, 14.00"H x 12.00"W x 8.00"D	PF
2	1	EA	HOFFMAN	A14P12AL	ALUMINUM MOUNTING PLATE, 12.75"H x 10.88"W, FOR ITEM #1	PF
3	A/R	EA	PHOENIX CONTACT	1207653	DIN RAIL, 35MM X 7.5MM, SLOTTED, 1M LENGTH	PF
4	5	EA	PHOENIX CONTACT	3022276	END RETAINER, SCREWLESS, 'CLIPFIX 35' FOR 35MM DIN RAIL, GRAY	PF
5	1	EA	SQUARE D	QOU115	CIRCUIT BREAKER, DIN RAIL MOUNT, SINGLE POLE, 15 AMP	PF
6	1	EA	SQUARE D	LC1D12BD	TESYS IEC CONTACTOR, 3-POLE, 600VAC/12A. RATING, 24VDC COIL, 1-HP @ 1-PH., 115V	PF
7	1	EA	PHOENIX CONTACT	2938581	POWER SUPPLY, 'QUINT-PS/100-240VAC/24DC/3', 100-240VAC INPUT, 24VDC OUTPUT, 3A.	PF
8	5	EA	PHOENIX CONTACT	3046485	COMPONENT TERMINAL BLOCK, 20A, 500V, TYPE 'UT 6-TG', GRAY	PF
9	2	EA	PHOENIX CONTACT	3046524	FUSE PLUG, WITH NEON LIGHT INDICATOR, 250V, TYPE 'P-FU 6, 3X32 LA 250', BLACK, HOLDS 1/4 X 1-1/4 IN FUSE, FOR THE ABOVE TERMINAL	PF
10	3	EA	PHOENIX CONTACT	3046508	FUSE PLUG, WITH LED LIGHT INDICATOR, 250V, TYPE 'P-FU 6, 3X32 LED 24', HOLDS 1/4 X 1-1/4 IN FUSE, BLACK, FOR THE ABOVE TERMINAL	PF
11	16	EA	PHOENIX CONTACT	3044102	TERMINAL BLOCK, FEED THROUGH, TYPE 'UT 4', GRAY	PF
12	3	EA	PHOENIX CONTACT	3003224	PARTITION PLATE, TYPE "ATP-UK", FOR 'UK 4' TYPE TERMINALS	PF
13	3	EA	PHOENIX CONTACT	3047028	END COVER, TYPE 'UT-4', FOR ABOVE TERMINALS, GRAY	PF
14	1	EA	PHOENIX CONTACT	3030284	PLUG-IN BRIDGE, FULLY INSULATED, 2-POSITION, TYPE 'FBS 2-8', FOR UT 6-TG TERMINALS, RED (SEE GENERAL NOTE D)	PF
15	1	EA	PHOENIX CONTACT	3030297	PLUG-IN BRIDGE, FULLY INSULATED, 3-POSITION, TYPE 'FBS 3-8', FOR UT 6-TG TERMINALS, RED (SEE GENERAL NOTE D)	PF
16	2	EA	PHOENIX CONTACT	3030336	PLUG-IN BRIDGE, FULLY INSULATED, 2-POSITION, TYPE 'FBS 2-6', FOR UT-4 TERMINALS, RED (SEE GENERAL NOTE D)	PF
17						
18	1	EA	PHOENIX CONTACT	2967073	TERMINAL BLOCK RELAY, TYPE 'PLC-RSC-24UC/21-21', 24VDC	PF
19						
20	1	EA	BUSSMANN	AGC-7	FUSE, 1.25" X .25", FAST ACTING, 7 AMP	PF
21	1	EA	BUSSMANN	AGC-2	FUSE, 1.25" X .25", FAST ACTING, 2 AMP	PF
22	0	EA	BUSSMANN	AGC-1	FUSE, 1.25" X .25", FAST ACTING, 1 AMP	PF
23	3	EA	BUSSMANN	AGC-.25	FUSE, 1.25" X .25", FAST ACTING, .25 AMP	PF
24						
25	1	EA	SQUARE D	XB4BD33	SELECTOR SWITCH, 3-POS. STANDARD LEVER, BLACK KNOB, 2-N.O. CONTACTS MAINTAINED	PF
26	1	EA	SQUARE D	ZBY2387	LEGEND PLATE, STANDARD BLACK OR RED BACKGROUND, ENGRAVED 'HAND OFF AUTO'	PF
27						
28	1	EA	BADGER	350T	350T WIRELESS TRANSMITTER 'TYPE RTR', BATTERY POWERED, 30mS-70mS PULSE WIDTH OUTPUT, W/RED & BLK WIRE, 10FT. LENGTH	FH
29	1	EA	BADGER	350T	350T WIRELESS TRANSMITTER 'TYPE ADE', BATTERY POWERED, 30mS-70mS PULSE WIDTH OUTPUT, W/RED & BLK WIRE, 10FT. LENGTH	FH
30	1	EA	PANEL FABRICATOR	---	GROUNDING LUG	PF


31	5	EA	PANEL FABRICATOR	---	PHENOLIC NAMEPLATES (SEE NOTE E)	PF
32	A/R	LOT	PHOENIX CONTACT	0825469	UC-EMPL (27X12.5), SELF-ADHESIVE, DOUBLE-LAYER GPE PLASTIC LABELS, 27 X 12.5 MM	PF
33	--	LOT	PHOENIX CONTACT	0825475	UC-EMPL (27X18), SELF-ADHESIVE, DOUBLE-LAYER GPE PLASTIC LABELS, 27 X 18 MM	--
34	A/R	LOT	PHOENIX CONTACT	0818111	UC-TM 4, SNAP-ON PLASTIC TERMINAL MARKER, 4.2 X 10.5 MM, FOR 'UT 4' AND 'UT 4-TG' TERMINALS	PF
35	A/R	LOT	PHOENIX CONTACT	0818085	UC-TM 6, SNAP-ON PLASTIC TERMINAL MARKER, 6.2 X 10.5 MM, FOR 'UT 6-TG' TERMINALS	PF

NAMEPLATE SCHEDULE									
NP #	QTY.	PLATE SIZE	LETTER SIZE	PLATE COLOR	LETTER COLOR	TEXT LINE 1	TEXT LINE 2	TEXT LINE 3	
31	1	1-1/2" x 5"	1/2"	WHITE	BLACK	CP-336AM			
32	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	CB2			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBAC			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	CON-16			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	DCPS10			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBDC			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	CR23			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBF			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	PNL-GND			
	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	SS16			
31	1	1/2" X 1-1/2"	3/16"	WHITE	BLACK	FT-336A-MPS			
	1	1/2" X 1-1/2"	3/16"	WHITE	BLACK	FT-336A-DCW			
	1	1" X 2-1/2"	3/16"	WHITE	BLACK	DCW	RECIRCULATION	PUMP	
	1	1" X 2-1/2"	3/16"	YELLOW	BLACK	120VAC POWER	FROM XX	CKT YY	1

LEGEND PLATE SCHEDULE								
LP #	QTY.	PLATE SIZE	LETTER SIZE	PLATE COLOR	LETTER COLOR	TEXT LINE 1	TEXT LINE 2	
1	2	STANDARD	3/16"	BLACK	WHITE	OFF	HAND AUTO	

SHEET NOTES:

SEE SHEET PC-336AM.1.3 FOR DRAWING NOTES.

REV. NO.	DATE	DESCRIPTION	<div>FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 TELEPHONE (513)241-5640 CINCINNATI, OHIO 45202 WWW.FHENG.COM</div>	<div></div>	Jimmy Huntington Building	Date: 20 APR 2010	<div>UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-336AM BILL OF MATERIAL AND NAMEPLATE SCHEDULE FORT WAINWRIGHT, AK. DU PROJECT NO. J101395, 101396, 101397</div>	<div>Drawing No. PC-336AM.I.2</div>
					714 Fourth Avenue, Suite 201	Scale: NTS		
					Fairbanks, Alaska 99701	Designed By: LG		
					Telephone (907) 455-1500	Drawn By: AJJ		
					Fax (907) 455-6788	Checked By: JET		
	04/21/10	ISSUED FOR REVIEW						

GENERAL NOTES:


- A. NUMBER INSIDE OF CIRCLE REFERS TO ITEM NUMBER ON BILL OF MATERIAL.
- B. SINGLE WIRES SHALL BE MTW 16 AWG, EXCEPT WHERE INTENDED FOR POWER CIRCUITS, WHICH SHALL BE AWG 14. TWISTED PAIR ANALOG SIGNAL CABLES SHALL BE BELDEN 8760 OR EQUAL. EACH WIRE SHALL BE IDENTIFIED WITH A PERMANENT WIRE LABEL AS NOTED ON WIRING DRAWINGS. ALL PANEL WIRING NOT RUN IN WIREWAY SHALL BE WIRE-TIED TOGETHER AND ATTACHED TO ADHESIVE CONNECTION POINTS TO PRESENT A NEAT AND ORDERLY FINISHED APPEARANCE.
- C. ALL EQUIPMENT CLEARANCES SHALL BE PER MANUFACTURER’S RECOMMENDATIONS FOR VENTILATION AND HEAT DISSIPATION.
- D. USE CONNECTED JUMPERS ON TERMINAL BLOCKS, CUT TO FIT AS REQUIRED. INSTALL PROPER FUSE SIZES IN FUSE HOLDERS AS INDICATED ON WIRING DRAWINGS.
- E. PANEL FABRICATOR TO PROVIDE INTERIOR PLASTIC NAMEPLATES. ALSO PROVIDE EXTERIOR PHENOLIC NAMEPLATES WITH CHAMFERED EDGES, SIZE, COLOR, AND TEXT AS NOTED. SEE NAMEPLATE SCHEDULE.

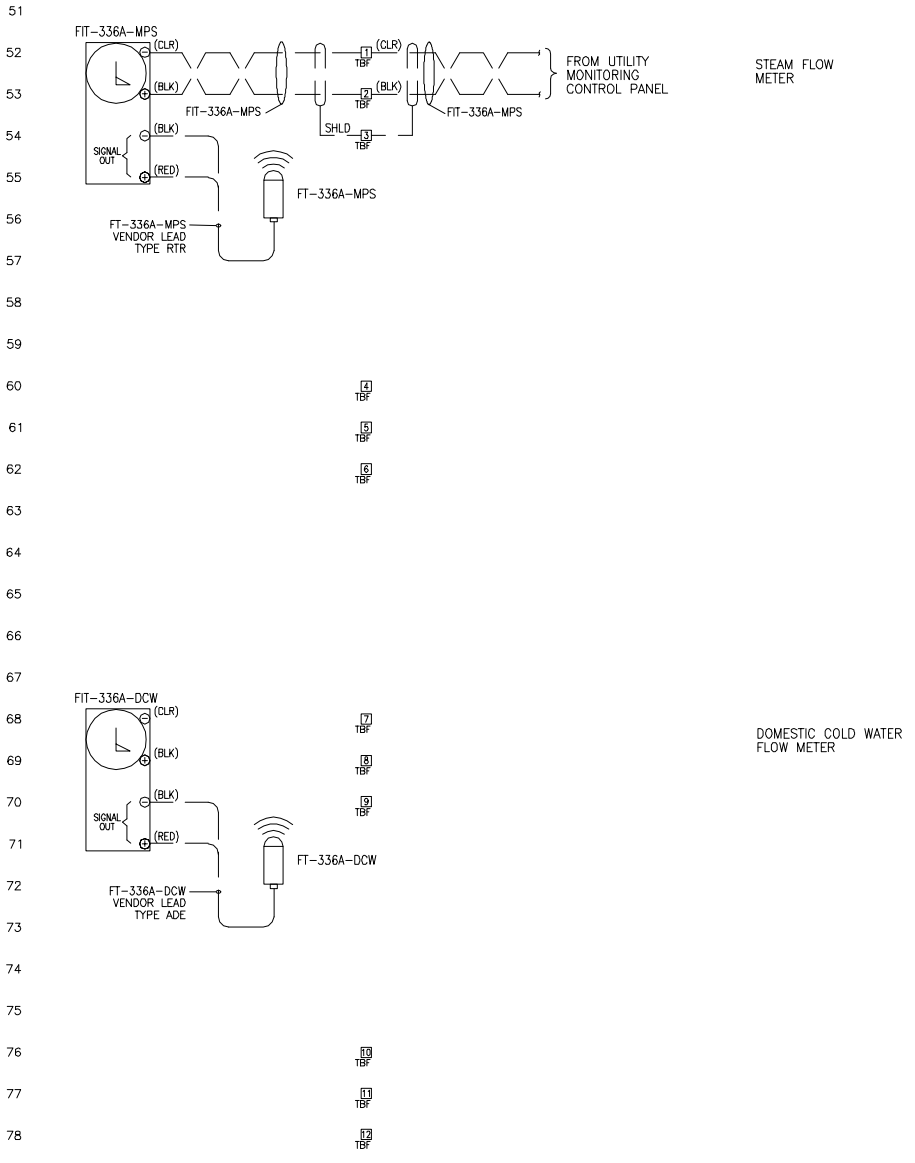
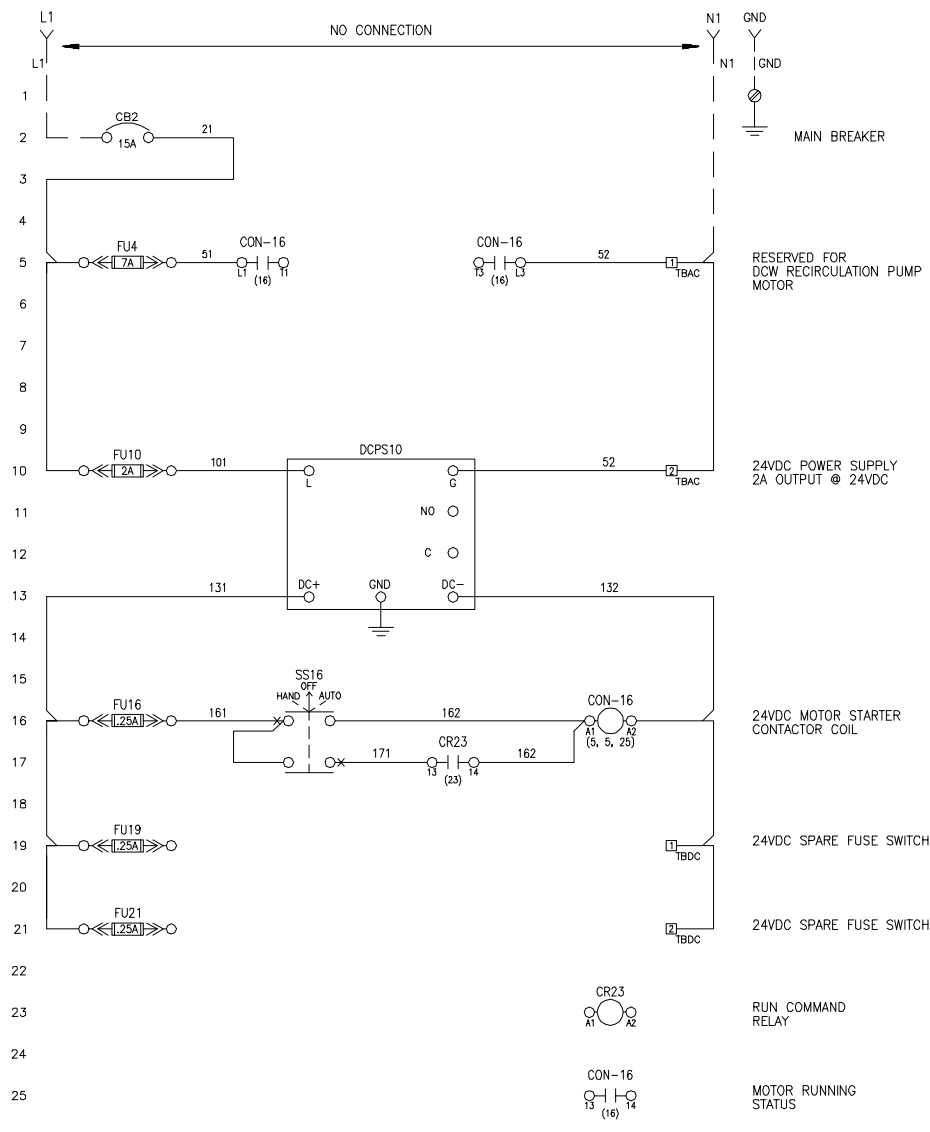
DRAWING NOTES:

- 1. REFER TO POWER DRAWING FOR APPROPRIATE PANEL NAME (XX) AND CIRCUIT NUMBER (YY) FOR THE SUPPLIED 120 VAC POWER.
- 2. NAMEPLATE TO BE MOUNTED NEAR THE DEVICE ON THE INTERIOR FACE OF THE PANEL ENCLOSURE DOOR.
- 3. PROVIDE SNAP-ON TERMINAL TAGS WHICH SHALL BE WHITE PLASTIC WITH BLACK, MACHINE-PRINTED CHARACTERS, UNLESS OTHERWISE NOTED. THE TAG WIDTH SHOULD NOT EXCEED THE TERMINAL DEVICE WIDTH.
- 4. THE ORIENTATION OF THE ENCLOSURE SHALL BE WITH THE CONTINUOUS HINGE POSITIONED AT THE BOTTOM AS SHOWN.


LEGEND:

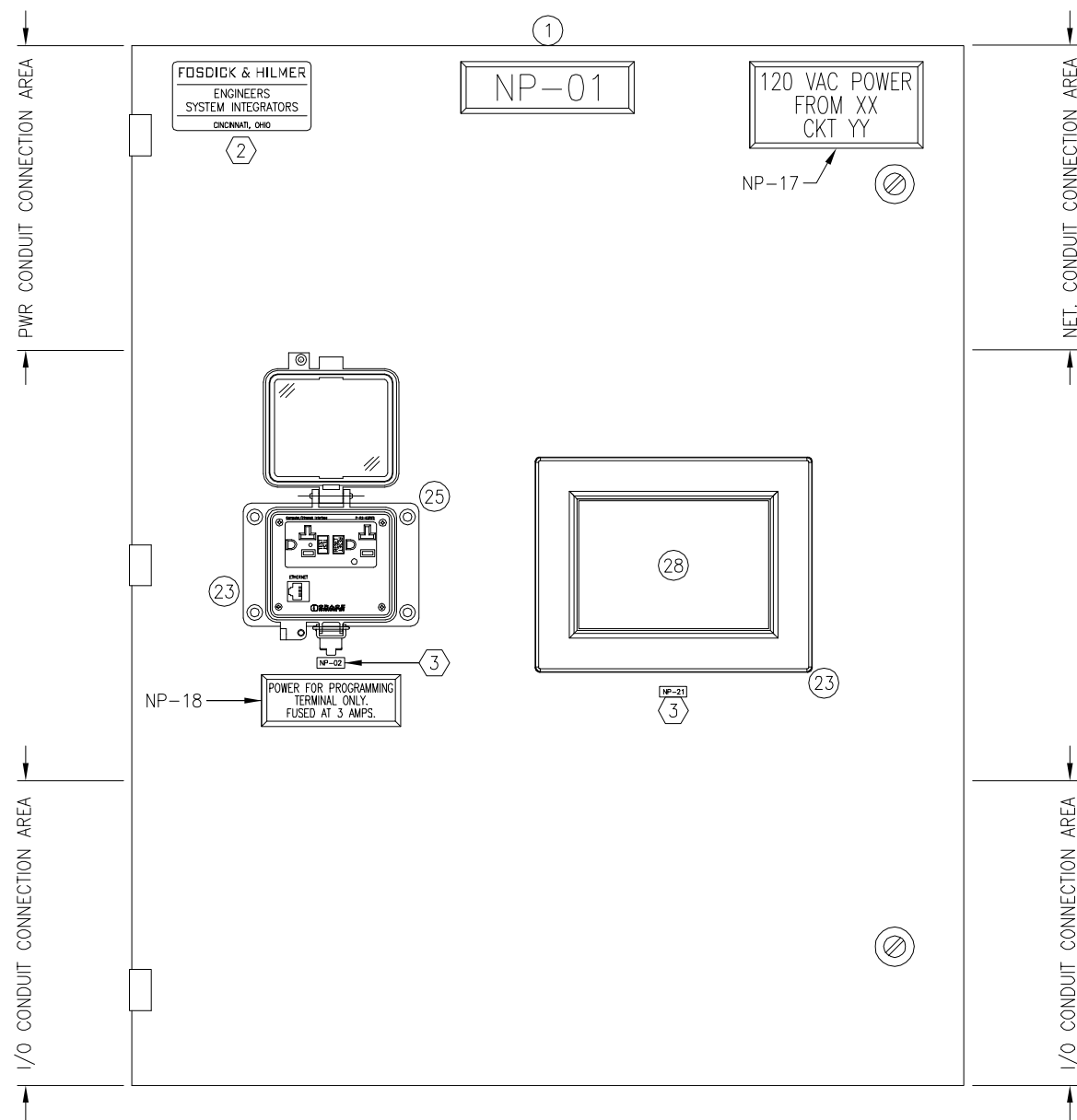
- PF – DENOTES ‘PANEL FABRICATOR’
- EC – DENOTES ‘ELECTRICAL CONTRACTOR’
- FH – DENOTES ‘FOSDICK AND HILMER’

REV. NO.	DATE	DESCRIPTION	<div>FOSDICK &HILMER CONSULTING ENGINEERS</div> <div>309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202</div> <div>TELEPHONE (513)241-5640 WWW.FHENG.COM</div>	<div></div> <div>Jimmy Huntington Building</div> <div>714 Fourth Avenue, Suite 201</div> <div>Fairbanks, Alaska 99701</div> <div>Telephone (907) 455-1500</div> <div>Fax (907) 455-6788</div>	Date: 21 APR 2010	UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE	Drawing No.
					Scale: NTS		
					Designed By: LG		
					Drawn By: AJJ		
	04/21/10	ISSUED FOR REVIEW			Checked By: JET	FORT WAINWRIGHT, AK.	PC-336AM.1.3
						DU PROJECT NO. J101395, 101396, 101397	

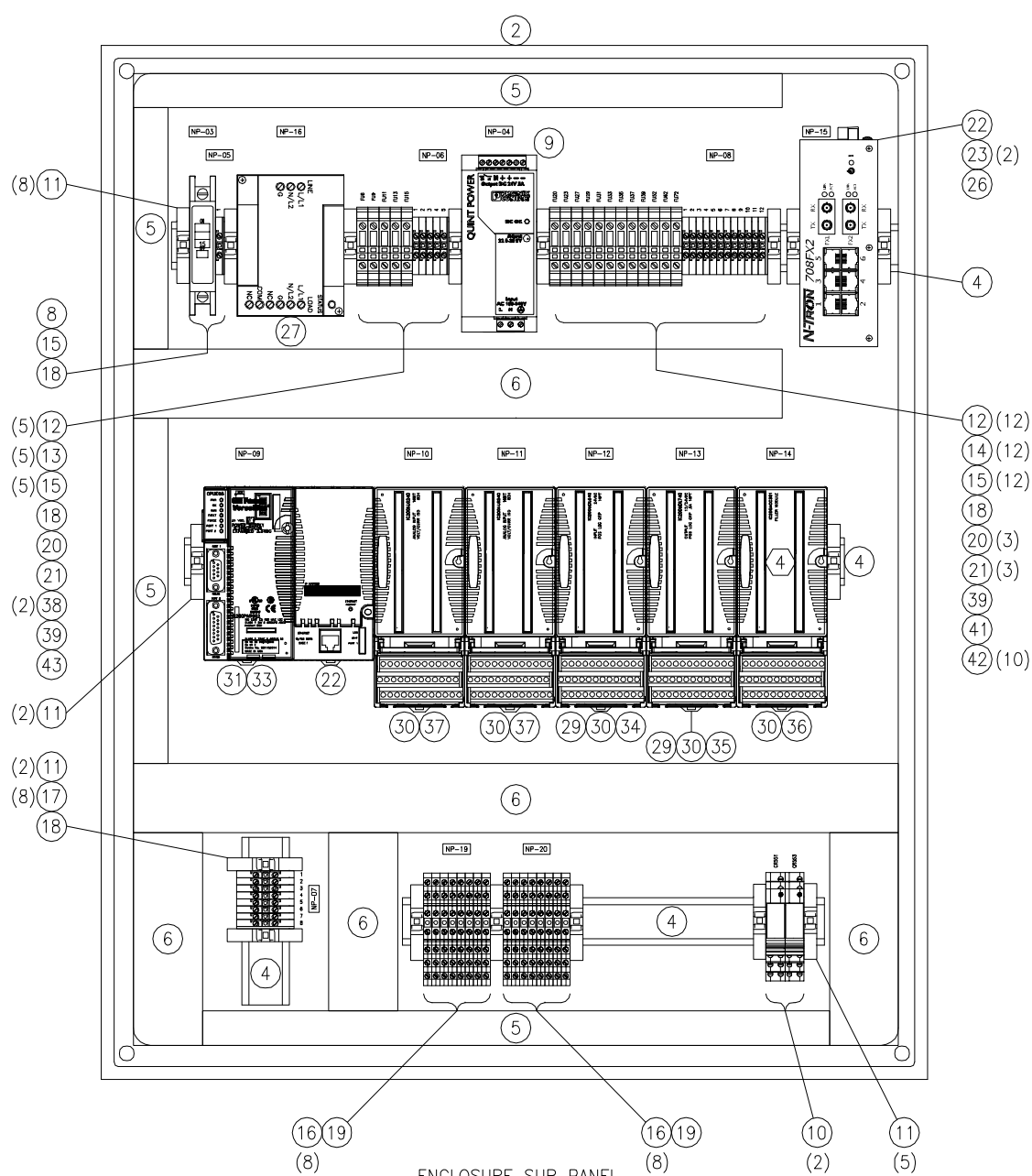


DRAWING NOTE:
1. INSTALL PLUG-IN BRIDGE JUMPERS AS REQUIRED.

REV. NO.	DATE	DESCRIPTION	FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202 TELEPHONE (513)241-5640 WWW.FHENG.COM			Jimmy Huntington Building 714 Fourth Avenue, Suite 201 Fairbanks, Alaska 99701 Telephone (907) 455-1500 Fax (907) 455-6788	Date: 20 APR 2010 Scale: NTS Designed By: LG Drawn By: AJJ Checked By: JET	UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-336AM, POWER DISTRIBUTION WIRING FORT WAINWRIGHT, AK. DU PROJECT NO. J101395, 101396, 101397	Drawing No. PC-336AM.2.1
	04/21/10	ISSUED FOR REVIEW							

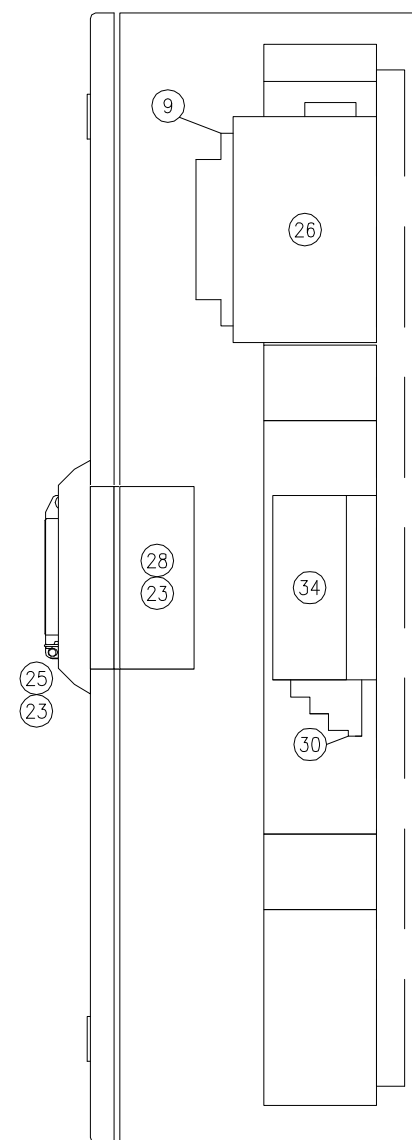


ENCLOSURE FRONT VIEW
30"H x 24"W x 8"D SS ENCLOSURE



ENCLOSURE SUB PANEL
28.20"H x 22.20"W STEEL PLATE

PANEL TO BEAR
UL508A LABEL



ENCLOSURE SIDE VIEW

SHEET NOTES:

- SEE SHEET PC-G693.1.3 FOR DRAWING NOTES.

REV. NO.	DATE	DESCRIPTION
1	04/16/10	REVISED FOR PANEL FABRICATION
	03/15/10	ISSUED FOR PANEL FABRICATION

FOSDICK & HILMER CONSULTING ENGINEERS
309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202
TELEPHONE (513)241-5640 WWW.FHENG.COM



Jimmy Huntington Building
714 Fourth Avenue, Suite 201
Fairbanks, Alaska 99701
Telephone (907) 455-1500
Fax (907) 455-6788

Date: 15 MAR 2010
Scale: NTS
Designed By: LG
Drawn By: AJJ
Checked By: JET

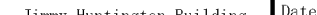
UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE
CP-G693, PANEL LAYOUT
FORT WAINWRIGHT, AK.
DU PROJECT NO. J101395, 101396, 101397

Drawing No.
PC-G693.1.1

ITEM #	QTY.	UNIT	MANUFACTURER	CATALOG #	DESCRIPTION	SUPPLIED BY (SEE LEGEND)
1	1	EA	WIEGMANN	N412302408SSAC	ULTIMATE SERIES SINGLE DOOR WALL MOUNT ENCLOSURE, 14 GAUGE TYPE 316 STAINLESS STEEL, NEMA TYPE 4X 30" HIGH X 24" WIDE x 8" DEEP	PF
2	1	EA	WIEGMANN	NP3024SSAC	STEEL MOUNTING PLATE, 28.2"H X 22.2"W, FOR ITEM #1	PF
3						
4	A/R	M	PHOENIX CONTACT	1207653	DIN RAIL, 35MM X 7.5MM, SLOTTED, 1M LENGTH	PF
5	A/R	FT	PANDUIT	F1X3WH6 / C1WH6	WIRE DUCT, NARROW FINGERED, 1" W X 3" D, WHITE, WITH COVER, 6 FT LENGTH	PF
6	A/R	FT	PANDUIT	H2X3WH6 / HC2WH6	WIRE DUCT, WIDE FINGERED, 2" W X 3" D, WHITE, WITH SLOTTED HINGED COVER, 6 FT LENGTH	PF
7						
8	1	EA	SQUARE D	QOU115	CIRCUIT BREAKER, DIN RAIL MOUNT, SINGLE POLE, 15 AMP	PF
9	1	EA	PHOENIX CONTACT	2938581	POWER SUPPLY, 'QUINT-PS/100-240VAC/24DC/5', 100-240VAC INPUT, 24VDC OUTPUT, 5A.	PF
10	2	EA	PHOENIX CONTACT	2967073	TERMINAL BLOCK RELAY, TYPE 'PLC-RSC-24UC/21-21', 24VDC	PF ⑤
11	17	EA	PHOENIX CONTACT	3022276	END RETAINER, SCREWLESS, 'CLIPFIX 35' FOR 35MM DIN RAIL, GRAY	PF
12	17	EA	PHOENIX CONTACT	3046485	COMPONENT TERMINAL BLOCK, 20A, 500V, TYPE 'UT 6-TG', GRAY	PF ⑤
13	5	EA	PHOENIX CONTACT	3046524	FUSE PLUG, WITH NEON LIGHT INDICATOR, 250V, TYPE 'P-FU 6, 3X32 LA 250', BLACK, HOLDS 1/4 X 1-1/4 IN FUSE, FOR THE ABOVE TERMINAL	PF ⑤
14	12	EA	PHOENIX CONTACT	3046508	FUSE PLUG, WITH LED LIGHT INDICATOR, 250V, TYPE 'P-FU 6, 3X32 LED 24', HOLDS 1/4 X 1-1/4 IN FUSE, BLACK, FOR THE ABOVE TERMINAL	PF ⑤
15	17	EA	PHOENIX CONTACT	3044102	TERMINAL BLOCK, FEED THROUGH, TYPE 'UT 4', GRAY	PF ⑤
16	16	EA	PHOENIX CONTACT	2718206	TERMINAL BLOCK, 4-LEVEL SENSOR AND ACTUATOR, TYPE 'VIOK 1,5-3D/PE'	PF ⑤
17	8	EA	PHOENIX CONTACT	3044128	GROUND TERMINAL BLOCK, FEED THROUGH, TYPE 'UT 4-PE', GRN/YEL	PF ⑤
18	4	EA	PHOENIX CONTACT	3047028	END COVER, TYPE 'UT-4', FOR ABOVE TERMINALS, GRAY	PF
19	2	EA	PHOENIX CONTACT	2716680	INSERTION BRIDGE, FULLY INSULATED, 10-POS., TYPE 'EB 10-DIK BU' (SEE GENERAL NOTE F)	PF
20	4	EA	PHOENIX CONTACT	3030310	PLUG-IN BRIDGE, FULLY INSULATED, 5-POSITION, TYPE 'FBS 5-8', FOR UT-6 TERMINALS, RED (SEE NOTE F)	PF
21	4	EA	PHOENIX CONTACT	3030349	PLUG-IN BRIDGE, FULLY INSULATED, 5-POSITION, TYPE 'FBS 5-6', FOR UT-4 TERMINALS, RED (SEE NOTE F)	PF
22	1	EA	BELKIN	A3L791-04-GRN	4FT RJ45 CAT5e PATCH CABLE, SNAGLESS MOLDED, GREEN (SEE NOTE H)	PF
23	2	EA	BELKIN	A3L791-07-GRN	7FT RJ45 CAT5e PATCH CABLE, SNAGLESS MOLDED, GREEN (SEE NOTE H)	PF
24						
25	1	EA	GRACEPORT	P-R2-K3RFO	COMPUTER/ETHERNET INTERFACE WITH 120VAC, 20A. GFCI OUTLET	PF
26	1	EA	N-TRON	708FX2-SC	MANAGED INDUSTRIAL ETHERNET SWITCH W/6 10/100 BASETX PORTS & 2 100 BASEFX FIBER PORTS, SC STYLE	PF
27	1	EA	CONTROL CONCEPTS	IE-120	SURGE SUPPRESSOR, 20A CONTINUOUS CURRENT @ 120VAC	PF

ITEM #	QTY.	UNIT	MANUFACTURER	CATALOG #	DESCRIPTION	SUPPLIED BY (SEE LEGEND)
28	1	EA	GE FANUC	IC754VSI06STD	QUICKPANEL VIEW HMI, 6", STN TOUCH SCREEN	FH
29	2	EA	GE FANUC	IC200ACC303	VERSAMAX SHORTING BAR	FH
30	5	EA	GE FANUC	IC200CHS022	VERSAMAX IO CARRIER MODULE – COMPACT	FH
31	1	EA	GE FANUC	IC200CPUE05	VERSAMAX ETHERNET CPU MODULE	FH
32	--	EA	GE FANUC	IC200PWB001	VERSAMAX POWER SUPPLY CARRIER MODULE	FH
33	1	EA	GE FANUC	IC200PWR002	VERSAMAX 3.3VDC EXPANDED POWER SUPPLY MODULE, 24VDC	FH
34	1	EA	GE FANUC	IC200MDL640	VERSAMAX DISCRETE INPUT MODULE, 24VDC, 16 PT	FH
35	1	EA	GE FANUC	IC200MDL740	VERSAMAX RELAY OUTPUT MODULE, 24VDC, 2A, 8 PT	FH
36	1	EA	GE FANUC	IC200ACC301	VERSAMAX FILLER MODULE	FH
37	2	EA	GE FANUC	IC200ALG240	VERSAMAX ISOLATING ANALOG INPUT MODULE, 24VDC, 8 CH	FH
38	--	EA	BUSSMANN	AGC-5	FUSE, 1.25" X .25", FAST ACTING, 5 AMP	--
39	2	EA	BUSSMANN	AGC-3	FUSE, 1.25" X .25", FAST ACTING, 3 AMP	PF
40	--	EA	BUSSMANN	AGC-2	FUSE, 1.25" X .25", FAST ACTING, 2 AMP	PF
41	1	EA	BUSSMANN	AGC-1/2	FUSE, 1.25" X .25", FAST ACTING, .5 AMP	PF
42	10	EA	BUSSMANN	AGC-1	FUSE, 1.25" X .25", FAST ACTING, 1 AMP	PF
43	1	EA	BUSSMANN	AGC-6	FUSE, 1.25" X .25", FAST ACTING, 6 AMP	PF
44	A/R	LOT	PANEL FABRICATOR	---	PHENOLIC NAMEPLATES (SEE NOTE G)	PF
45	A/R	LOT	PHOENIX CONTACT	0825469	UC-EMPL (27X12.5), SELF-ADHESIVE, DOUBLE-LAYER GPE PLASTIC LABELS, 27 X 12.5 MM	PF
46	A/R	LOT	PHOENIX CONTACT	0825475	UC-EMPL (27X18), SELF-ADHESIVE, DOUBLE-LAYER GPE PLASTIC LABELS, 27 X 18 MM	PF
47						
48						
49						

1. SEE SHEET PC-G693.1.3 FOR DRAWING NOTES.

REV. NO.	DATE	DESCRIPTION	FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202 TELEPHONE (513)241-5640 WWW.FHENG.COM		Jimmy Huntington Building	Date: 15 MAR 2010	UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-G693, BILL OF MATERIALS FORT WAINWRIGHT, AK. DU PROJECT NO. J101395, 101396, 101397	Drawing No. PC-G693.1.2
					714 Fourth Avenue, Suite 200	Scale: NTS		
					Fairbanks, Alaska 99701	Designed By: LG		
					Telephone (907) 455-1500	Drawn By: AJJ		
					Fax (907) 455-6788	Checked By: JET		

NAMEPLATE SCHEDULE									
	NP #	QTY.	PLATE SIZE	LETTER SIZE	PLATE COLOR	LETTER COLOR	TEXT LINE 1	TEXT LINE 2	TEXT LINE 3
44	01	1	1-1/2" x 5"	3/4"	WHITE	BLACK	CP-G693		
45	02	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	RECP6		
	03	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	CB2		
	04	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	DCPS15		
	05	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBAC		
	06	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBN		
	07	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBG		
	08	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TBDC		
	09	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	PLC-G693		
46	10	1	18 MM X 27 MM	7 MM	WHITE	BLACK	MODULE 1	PLC401	
	11	1	18 MM X 27 MM	7 MM	WHITE	BLACK	MODULE 2	PLC451	
	12	1	18 MM X 27 MM	7 MM	WHITE	BLACK	MODULE 3	PLC501	
	13	1	18 MM X 27 MM	7 MM	WHITE	BLACK	MODULE 4	PLC551	
	14	1	18 MM X 27 MM	7 MM	WHITE	BLACK	MODULE 5	PLC601	
45	15	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	ENET23		
	16	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	SS2		
44	17	1	2-1/2" x 5"	1/2"	YELLOW	BLACK	120 VAC POWER	FROM XX	CKT YY
	18	1	1-1/2" x 4"	1/4"	RED	WHITE	POWER FOR PROGRAMMING	TERMINAL ONLY.	FUSED AT 3 AMPS.
45	19	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TB-MOD-1		
	20	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	TB-MOD-2		
	21	1	12.5 MM X 27 MM	7 MM	WHITE	BLACK	HMI20		

GENERAL NOTES:

- A. NUMBER INSIDE OF CIRCLE REFERS TO ITEM NUMBER ON BILL OF MATERIAL.
- B. PANEL FABRICATOR TO PROVIDE UL 508A INSPECTION. FOLLOW NFPA 79 WHERE APPLICABLE.
- C. SINGLE WIRES SHALL BE MTW 16 AWG, EXCEPT WHERE INTENDED FOR POWER CIRCUITS, WHICH SHALL BE AWG 14. TWISTED PAIR ANALOG SIGNAL CABLES SHALL BE BELDEN 8760 OR EQUAL. EACH WIRE SHALL BE IDENTIFIED WITH A PERMANENT WIRE LABEL AS NOTED ON WIRING DRAWINGS. ALL PANEL WIRING NOT RUN IN WIREWAY SHALL BE WIRE-TIED TOGETHER AND ATTACHED TO ADHESIVE CONNECTION POINTS TO PRESENT A NEAT AND ORDERLY FINISHED APPEARANCE.
- D. AVOID ROUTING 120VAC WIRING INSIDE THE SAME WIREWAY AS DC ANALOG SIGNAL CABLES.
- E. ALL EQUIPMENT CLEARANCES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS FOR VENTILATION AND HEAT DISSIPATION.
- F. USE CONNECTED JUMPERS ON TERMINAL BLOCKS, CUT TO FIT AS REQUIRED. INSTALL PROPER FUSE SIZES IN FUSE HOLDERS AS INDICATED ON WIRING DRAWINGS.
- G. PANEL FABRICATOR TO PROVIDE INTERIOR PLASTIC NAMEPLATES. ALSO PROVIDE EXTERIOR PHENOLIC NAMEPLATES WITH CHAMFERED EDGES, SIZE, COLOR, AND TEXT AS NOTED. SEE NAMEPLATE SCHEDULE.
- H. RJ45E PATCH CABLES SHALL BE INSTALLED AS SHOWN IN WIRING DIAGRAM. EXCESS CABLE IS TO BE LOOPED AND WIRE TIED IN A NEAT AND ORDERLY FASHION IN THE PANDUIT WIREWAY.
- I. PANEL FABRICATOR IS RESPONSIBLE FOR RECALCULATING SHORT CIRCUIT CURRENT BASE ON SPECIFICATIONS OF FINAL EQUIPMENT.

UL RATING:

UL508A.

SHORT CIRCUIT CURRENT:

CB2 - 10kA@120/240VAC

ENCLOSURE RATED:

TYPE 4X

MODULE RATING SPECS:

GE FANUC MODULES:

IC200ALG240 ANALOG INPUT CLASS 1, DIV. 2, GROUPS A, B, C, D
IC200MDL640 DISCRETE INPUT CLASS 1, DIV. 2, GROUPS A, B, C, D
IC200MDL740 DISCRETE OUTPUT CLASS 1, DIV. 2, GROUPS A, B, C, D
IC200PWR002 POWER SUPPLY CLASS 1, DIV. 2, GROUPS A, B, C, D

DRAWING NOTES:

1. REFER TO POWER DRAWING FOR APPROPRIATE PANEL NAME (XX) AND CIRCUIT NUMBER (YY) FOR THE SUPPLIED 120 VAC POWER.
2. FOSDICK AND HILMER NAMEPLATE PROVIDED AND INSTALLED BY A FOSDICK AND HILMER REPRESENTATIVE.
3. NAMEPLATE TO BE MOUNTED NEAR THE DEVICE ON THE INTERIOR FACE OF THE PANEL ENCLOSURE DOOR.
4. RESERVED FOR EITHER DISCRETE IO MODULES OR NON-ISOLATING ANALOG MODULES ONLY.
5. PROVIDE SNAP-ON TERMINAL TAGS WHICH SHALL BE WHITE PLASTIC WITH BLACK CHARACTERS, UNLESS OTHERWISE NOTED. THE TAG WIDTH SHOULD NOT EXCEED THE TERMINAL DEVICE WIDTH.

LEGEND:

PF – DENOTES 'PANEL FABRICATOR'

EC – DENOTES 'ELECTRICAL CONTRACTOR'

FH - DENOTES 'FOSDICK AND HILMER'

TORQUE SPECS:

PHOENIX TERMINALS:

2718206 0.6 – 0.8 Nm

3044102 0.6 - 0.8 Nm
3044103 0.6 - 0.8 Nm

3046485 1.5 - 1.8 Nm

2938581 0.5 - 0.6 Nm

SQUARE D:

QOU115 4.86 Nm

FUSE SPECS:

REPLACE WITH FAST ACTING AGC FUSES ONLY:

FU23 - .5A

FU20 FU29, FU31, FU33, FU35, FU37, FU39, FU52, FU62, FU72 – 1A


FU6, FU27 - 3A

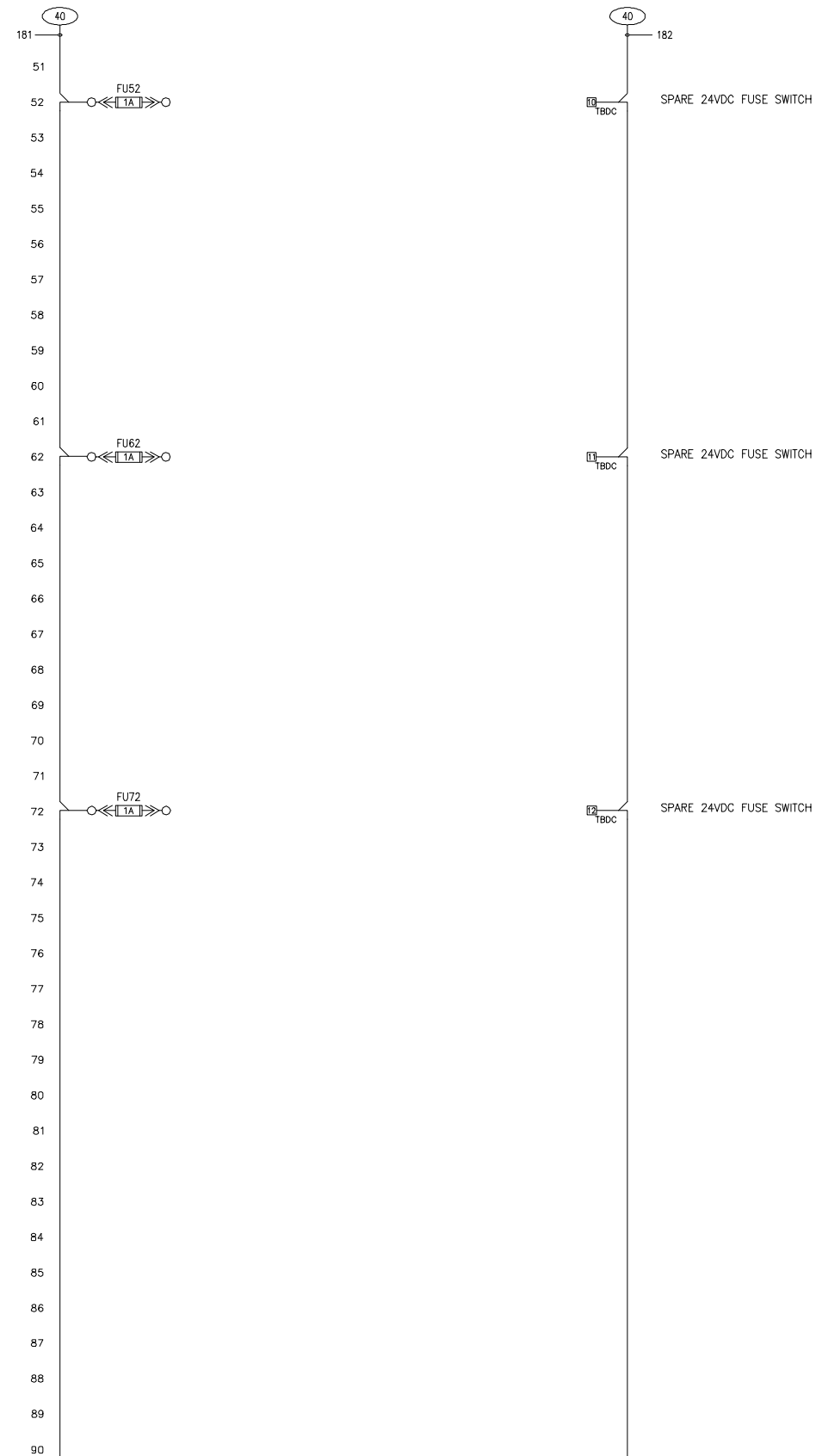
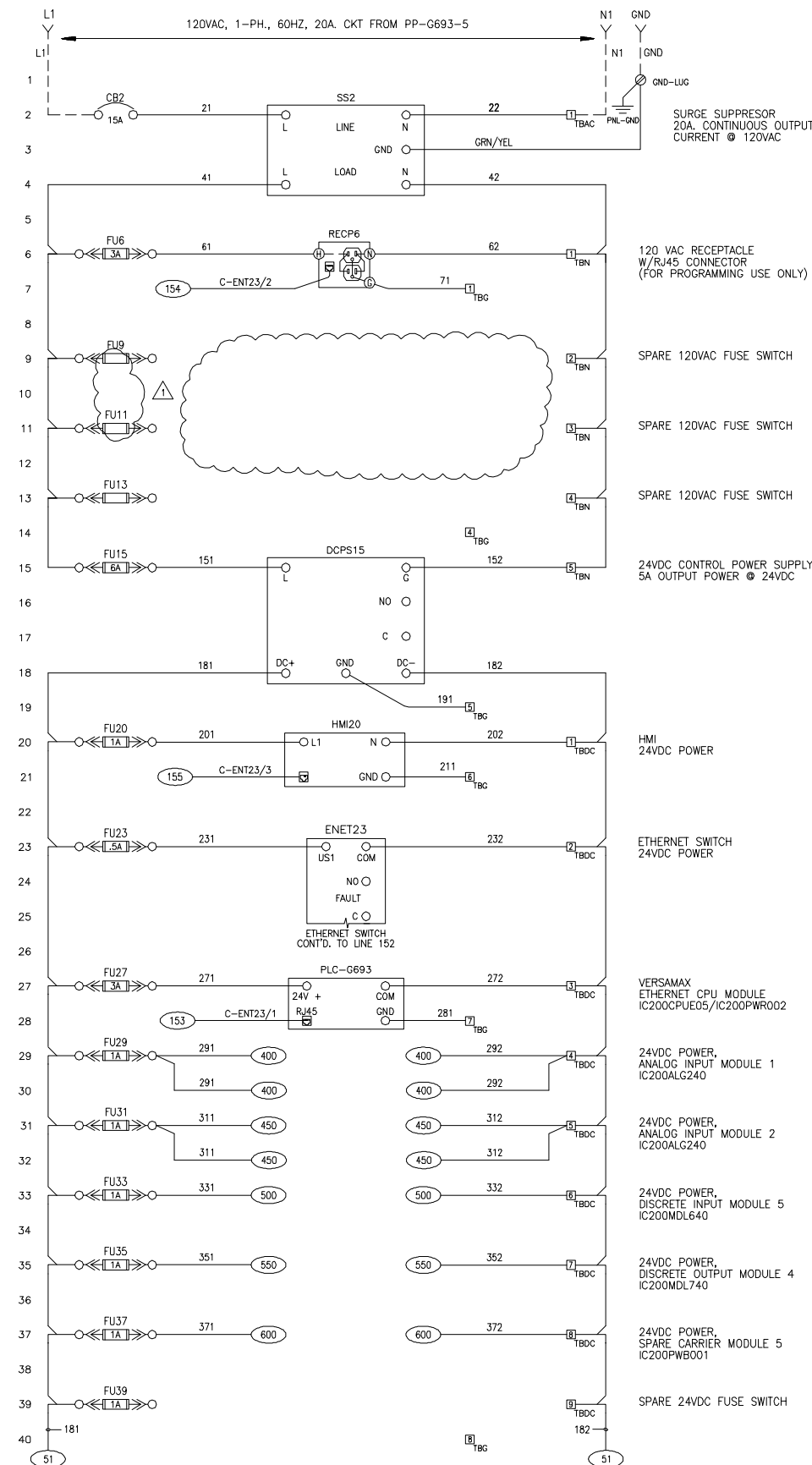


△FU15 - 6A

FU9, FU11, }FU13 - SPARE

1 FU15 - 6A
FU9, FU11, FU13

REV. NO.	DATE	DESCRIPTION	<div>FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202 TELEPHONE (513)241-5640 WWW.FHENG.COM</div>	<div>DOYON UTILITIES INC.</div>	Jimmy Huntington Building 714 Fourth Avenue, Suite 201 Fairbanks, Alaska 99701 Telephone (907) 455-1500 Fax (907) 455-6788	Date: 15 MAR 2010 Scale: NTS Designed By: LG Drawn By: AJJ Checked By: JET	UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-G693, NOTES, NAMEPLATE AND FUSE SCHEDULES	Drawing No.
1	04/21/10	REVISED FOR PANEL FABRICATION			FORT WAINWRIGHT, AK.			
	03/15/10	ISSUED FOR PANEL FABRICATION			DU PROJECT NO. J101395, 101396, 101397			



REV. NO.	DATE	DESCRIPTION
1	04/21/10	REVISED FOR PANEL FABRICATION
	03/15/10	ISSUED FOR PANEL FABRICATOR

FOSDICK & HILMER CONSULTING ENGINEERS
309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202
TELEPHONE (513)241-5640 WWW.FHENG.COM



Jimmy Huntington Building
714 Fourth Avenue, Suite 200
Fairbanks, Alaska 99701
Telephone (907) 455-1500
Fax (907) 455-6788

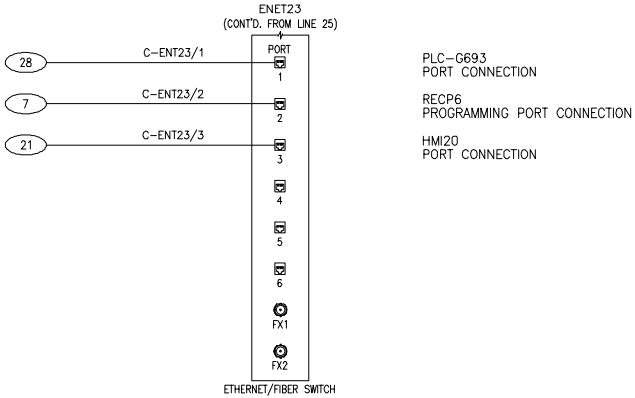
Date:	15 MAR 2010
Scale:	NTS
Designed By:	LG
Drawn By:	AJJ
Checked By:	JET


UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE
CP-G693, POWER DISTRIBUTION
FORT WAINWRIGHT, AK.
DU PROJECT NO. J101395, 101396, 101397

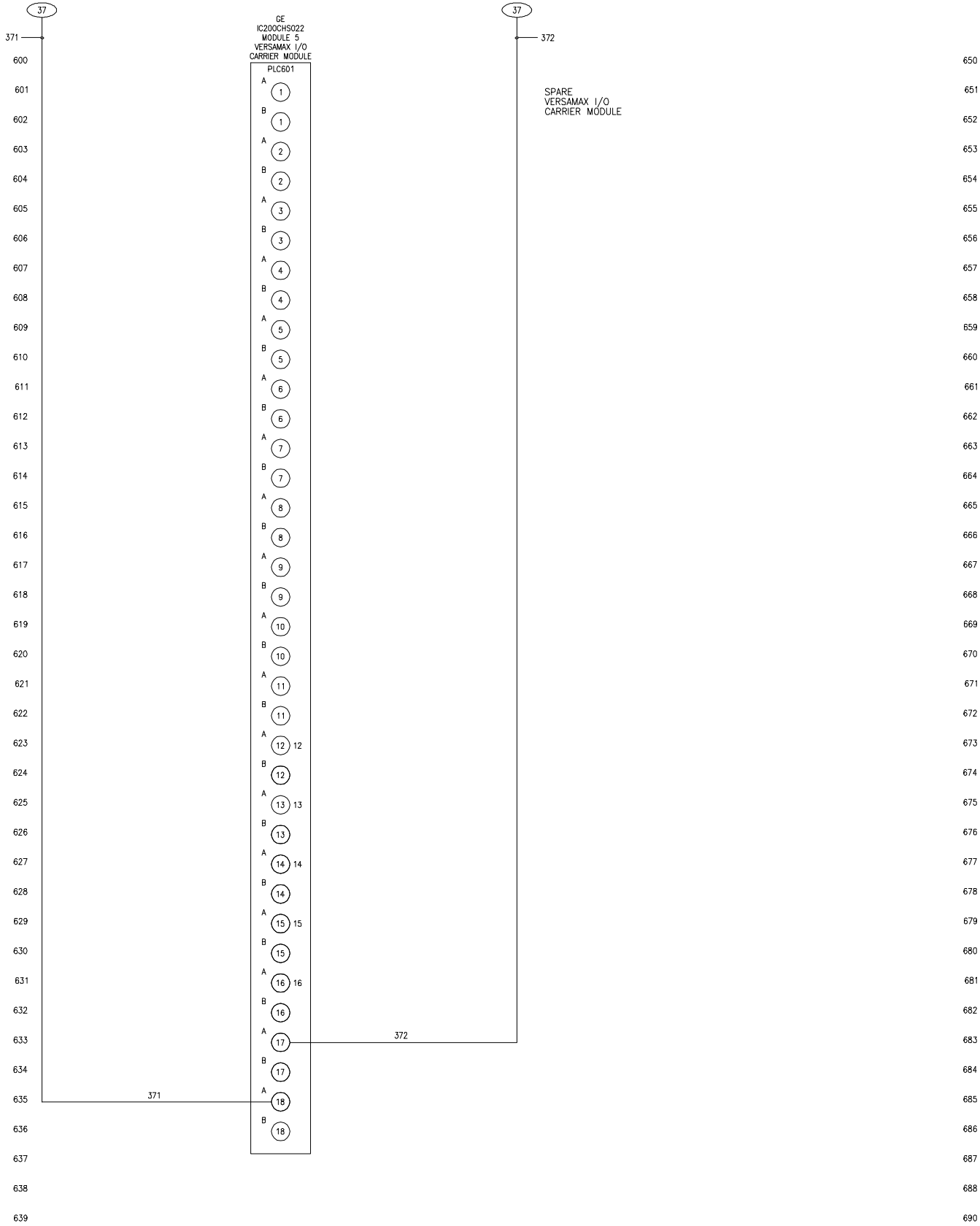
Drawing No.
C-G693.2.1

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REV. NO.	DATE	DESCRIPTION	<div>FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 CINCINNATI, OHIO 45202 TELEPHONE (513)241-5640 WWW.FHENG.COM</div> <div>DOYON UTILITIES</div> <div>Jimmy Huntington Building 714 Fourth Avenue, Suite 201 Fairbanks, Alaska 99701 Telephone (907) 455-1500 Fax (907) 455-6788</div>	Date: 15 MAR 2010	UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-G693, POWER DISTRIBUTION	Drawing No. PC-G693.2.2
		Scale: NTS				
		Designed By: LG				
1	04/21/10	REVISED FOR PANEL FABRICATION		Drawn By: AJJ	FORT WAINWRIGHT, AK.	
	03/15/10	ISSUED FOR PANEL FABRICATOR		Checked By: JET	DU PROJECT NO. J101395, 101396, 101397	



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REV. NO.	DATE	DESCRIPTION	FOSDICK & HILMER CONSULTING ENGINEERS 309 VINE STREET, SUITE 50 TELEPHONE (513)241-5640	CINCINNATI, OHIO 45202 WWW.FHENG.COM		Jimmy Huntington Building	Date: 15 MAR 2010	UTILITY SERVICE EXTENSION TO AIRCRAFT PARTS STORAGE CP-G693, MODULE 5	Drawing No. PC-G693.3.3
						714 Fourth Avenue, Suite 201	Scale: NTS		
						Fairbanks, Alaska 99701	Designed By: LG		
						Telephone (907) 455-1500	Drawn By: AJJ		
						Fax (907) 455-6788	Checked By: JET		
1	04/21/10	REVISED FOR PANEL FABRICATION						FORT WAINWRIGHT, AK. DU PROJECT NO. J101395, 101396, 101397	
	03/15/10	ISSUED FOR PANEL FABRICATION							