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SIMARK MASTER DRAWING INDEX

CUSTOMER NAME:	UNIVERSITY OF COLORADO
SALES ORDER ID:	SD-141228
PRODUCT LINE:	SFC EFOY
PRODUCT PART NUMBER:	SCL-EFOY-NOAA-4060P-2400D-24-M60-2-XX
TOTAL QTY:	1
CUSTOMER PO#:	1001046028



Simark Controls Ltd.
 10509 - 46 Street S.E.
 Calgary, Alberta, Canada T2C 5C2
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 Fax: (403) 279-6553, Internet: www.simark.com

SHEET	DRAWING TYPE	INDEX REVISION NUMBER							
1	SIMARK MASTER DRAWING INDEX	0							
2	BILL OF MATERIALS - B1	0							
3	LAMACOID SCHEDULE - L1	0							
4	EFOY BOX MECHANICAL LAYOUT - M1	0							
5	EFOY BOX MECHANICAL LAYOUT - M2	0							
6	EFOY BOX MECHANICAL LAYOUT - M3	0							
7	METHANOL FUEL BOX MECHANICAL LAYOUT - M4	0							
8	METHANOL FUEL CONNECTION MECHANICAL LAYOUT - M5	0							
9	EFOY BOX EXTERNAL WIND SHIELD LAYOUT - M6	0							
10	COMBINER BOX MECHANICAL LAYOUT - M7	0							
11	TERMINAL RAIL DETAIL - T1	0							
12	ELECTRICAL SCHEMATIC - E1	0							

REV#	REVISION TITLE	REV DATE
0	ISSUED FOR CONSTRUCTION	18 SEP 2018

NOTES:

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NO.	NOTES	NO.	DATE	REVISIONS	BY	CHK'D	APP'D	DATE APP'D
0	FOR USE IN GENERAL PURPOSE AREA	0	18 SEP 2018	ISSUED FOR CONSTRUCTION	KS	MS	PJT	18 SEP 2018



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CLIENT: UNIVERSITY OF COLORADO
 TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
 SCL-EFOY-NOAA-4060P-2400D-24-M60-2-XX
 SIMARK MASTER DRAWING INDEX

WD No.	WD-31181
SD No.	SD-141228
DWG. NO.	141228-1
SHEET:	1 OF 12

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1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

BILL OF MATERIALS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
1	1	AL4028-2105	EFOY PELICAN HARDIGG CASE 43"x31"x28" -40°C N3R	SCL
2	1	2335.25-PC-MP-LID	CUSTOM MOUNTING PLATE (LID) 35.25"x23.5"x2.5"x0.1"	SCL
3	1	1207-PC-MP	CUSTOM MOUNTING PLATE 12"x7"x0.1"	SCL
4	1	AGP-0905	CUSTOM GLAND PLATE, 9"x5"x0.1"	SCL
5	1	FUEL LINE PLATE	CUSTOM EFOY FUEL LINE PLATE WITH CUTOUT	SCL
6	1	KEL-QTA 50 B	ICOTEK PLUGGABLE ENTRY FRAME, IP54	SCL
7	1	QT7	ICOTEK GROMMET 7mm	SCL
8	4	QTB	ICOTEK GROMMET BLANK COVER	SCL
9	1	151 000 223	EFOY PRD 2400 DUO FUEL CELL 110W	SCL
9A	1	<C/W ITEM #1>	EFOY OPERATING PANEL DP2	SCL
9B	1	<C/W ITEM #1>	EFOY MOUNTING PLATE	SCL
9C	1	<C/W ITEM #1>	EFOY EXHAUST TUBE	SCL
9D	1	<C/W ITEM #1>	EFOY FUEL LINES	SCL
10	2	151 003 011	EFOY M28 CARTRIDGE ADAPTER US	SCL
11	-	-	-	SCL
12	2	NEMA 4X HOOD	ACE INTAKE/EXHAUST COVER N4X SS W/BAFFLES	SCL
13	1	109E5724H502	SANYO DENKI 24VDC, 6" FAN, 226CFM, 0.58A	SCL
14	2	09650-F/45	Q-TECH 6" PLASTIC GRILL C/W FILTER	SCL
15	1	KM172	SANYO DENKI 6" METAL FINGER GUARD	SCL
16	1	01147.9-00	STEGO N/D (COOLING) COMPACT THERMOSTAT (°C)	SCL
17	-	-	-	SCL
18	1	HEAT TRACE BRACKET	ACE EFOY EXHAUST ANGLED PIPE W/ HOLDING PLATE	SCL
19	1	KHL243-001CS-ES	HEAT-LINE HEAT TRACE 3W/FT 24VDC-1FT, NO BOOT	SCL
20	1	01146.9-00	STEGO N/C (HEATING) COMPACT THERMOSTAT (°C)	SCL
21	-	-	-	SCL
22	1	TS-MPPT-60	TS SOLAR SYSTEM CONTROLLER 60A 12/24/48VDC	SCL
23	1	MNEPV-60	MIDNITE 60A SOLAR MINIATURE CIRCUIT BREAKER	SCL
24	2	P1MB1PC63	LOVATO SERIES MINIATURE BREAKER 63A 72VDC	SCL
25	1	P1MB1PC10	LOVATO SERIES MINIATURE BREAKER 10A 72VDC	SCL
26	1	7914760001	WEIDMULLER SPARE FUSE STORAGE BOX	SCL

NOTE 1

SOLD SEPARATELY - FIELD INSTALLED - BILL OF MATERIALS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
70	4	150 905 100	EFOY FUEL CARTRIDGE M28 US	SCL
71	5	150 905 099	EFOY FUEL CARTRIDGE M10 US	SCL
72	2	EV12A-A	DISCOVER EV TRACTION AGM BATTERY 12V 156AH	SCL

NOTES:

- QUANTITY 1 OF ITEM QTB IS PROVIDED AS A BLANK COVER FOR WHEN THE MT60 FUEL CARTRIDGES ARE NOT EXTERNALLY ATTACHED TO EFOY FUEL LINES. ITEM QTB IS KEPT IN THE SPARE FUSE BOX. QUANTITY OF 3 EXTRA SPARES OF ITEM QTB ARE PROVIDED AND KEPT IN THE SPARE FUSE BOX.
- QUANTITY OF 2 SPARE FUSES, KEPT IN THE SPARE FUSE BOX ARE PROVIDED PER EACH FUSE SIZE AS SPARE. QUANTITY OF SPARE FUSES ARE INCLUDED IN THE BILL OF A MATERIAL QUANTITIES.

CONSUMABLE PARTS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
30	7	1020300000	WEID WDU 10 FEED TERMINAL 600V, 65A, #18-#6	SCL
31	1	1010300000	WEID WPE 10 GROUND TERMINAL #16-#6 (ENCLOSED)	SCL
32	-	-	-	SCL
33	-	-	-	SCL
34	14	1020100000	WEID WDU 4 FEED TERMINAL 600V, 35A, #26-#10	SCL
35	2	1010100000	WEID WPE 4 GROUND TERMINAL #26-10 (ENCLOSED)	SCL
36	3	1050000000	WEIDMULLER WAP 2.5 - 10 END PLATE (1.5MM)	SCL
37	LOT	1052260000	WEIDMULLER WQV 6/10 SCREWABLE JUMPER	SCL
38	-	-	-	SCL
39	12	1880430000	WEID WSI 4/2 FUSE TERMINAL 300V, 15A #30-#10	SCL
40	2	1880450000	WEID WAP WSI 4/2 FUSE TRMNL. END PLATE (2.5MM)	SCL
41	4	3835600000	WEIDMULLER EW 35 END BRACKET	SCL
42	4	1631930000	WEIDMULLER SCHK 5S TERMINAL MARKER	SCL
43	4	1631930000	WEIDMULLER TAG CARRIER PROTECTIVE STRIP	SCL
44	-	-	-	SCL
45	1	-	SIMARK CONTROLS STICKER	SCL
46	LOT	-	TS35 SLOTTED DIN RAIL	SCL
47	LOT	-	MECH. LUG [2] 2/0 - 14AWG	SCL
48	8	-	FUSE 1.25"x0.25" FAST ACTING GLASS 250V 2A	SCL
49	5	-	FUSE 1.25"x0.25" FAST ACTING GLASS 250V 4A	SCL
50	4	-	FUSE 1.25"x0.25" FAST ACTING GLASS 250V 6A	SCL
51	3	-	FUSE 1.25"x0.25" FAST ACTING GLASS 250V 15A	SCL
52	-	-	-	SCL
53	LOT	N8020	ALUMINUM NEUTRAL BAR	SCL
54	LOT	E199	SCREWS FOR NEUTRAL BAR (N8020)	SCL
55	LOT	T1E-1530-G	IBOCO WIREDUCT C/W COVER LT. GRAY	SCL
56	LOT	10-040	CUSTOM INTERIOR CASE FRAME (1.577"x1.577") (14',1")	SCL
57	LOT	10-016	CUSTOM INTERIOR CASE FRAME (0.75"x1.577") (37")	SCL
58	15	20-4040	2-HOLE GUSSETED INSIDE CORNER BRACKET FOR TSL0T	SCL
59	2	22-140	2-HOLE STRAIGHT FLAT PLATE FOR TSL0T	SCL
60	LOT	CUSTOM	2" INSULATION	SCL
61	LOT	CUSTOM	1" INSULATION	SCL
62	2	84-9139	RED BATTERY SAFETY COVERS FOR EV12A-A (#4-6)	SCL
63	2	84-9138	BLK BATTERY SAFETY COVERS FOR EV12A-A (#4-6)	SCL



NOTE 2

NO	NOTE	DESCRIPTION
A		FIELD WIREWAY
B		INTERNAL WIREWAY

PANEL SERIAL NUMBER	EFOY SERIAL NUMBER
WD-31181-1	-

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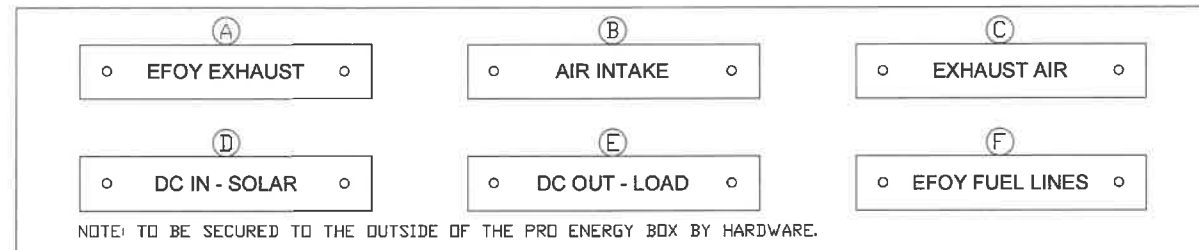
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	CLIENT: UNIVERSITY OF COLORADO TITLE: SIMARK CONTROLS EFOY PRDENERGYBOX 4060P FUEL CELL SYSTEM SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX BILL OF MATERIALS - B1	

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LAMACOIID SCHEDULE			
NO	QTY	PART NO.	DESCRIPTION
NO	TEXT	LAMACOIID DESCRIPTION	
A	4"	4" X 0.75" B-L/W-B	EFOY EXHAUST
B	4"	4" X 0.75" B-L/W-B	AIR INTAKE
C	4"	4" X 0.75" B-L/W-B	EXHAUST AIR
D	4"	4" X 0.75" B-L/W-B	DC IN - SOLAR
E	4"	4" X 0.75" B-L/W-B	DC OUT - LOAD
F	4"	4" X 0.75" B-L/W-B	EFOY FUEL LINES
G	4"	4" X 2" B-L/W-B	HEAT TRACE TEMPERATURE SETTING WARNING
H	4"	4" X 2" B-L/W-B	DISCONNECT EFOY FUEL CART WARNING
I	4"	4" X 2" B-L/W-B	INCLINATION WARNING
J	1"	1" X 4" B-L/W-B	CSA FUSE REPLACE WARNING (STR-F001)
K	3"	3" X 4" B-L/Y-B	DISCONNECT SWITCH (ENG) (LAM-D009)
L	3"	3" X 4" B-L/Y-B	DISCONNECT SWITCH (FRE) (LAM-D010)
M	1"	1" X 4" B-L/W-B	EFOY REPLACE BATTERIES WARNING (STICKER)
N	4.5"	4.5" X 5.5" B-L/W-B	EFOY HYBRID SYSTEM DO'S & DON'TS (STICKER)



EFOY PRO ENERGY BOX - DISCLAIMERS

TEMPERATURE SPECIFICATION:
EFOY PRO ENERGY BOX IS DESIGNED TO OPERATE TO -40°C. EFOY WILL UTILIZE ANTIFREEZE MODE FOR TEMPERATURE CONTROL OF EFOY FUEL STACK, FUEL CONSUMPTION AND MAINTENANCE OF FUEL SHALL BE MAINTAINED DURING ALL SEASONS TO PREVENT DAMAGE TO THE FUEL CELL. SEE EFOY MANUAL FOR FURTHER DETAIL.

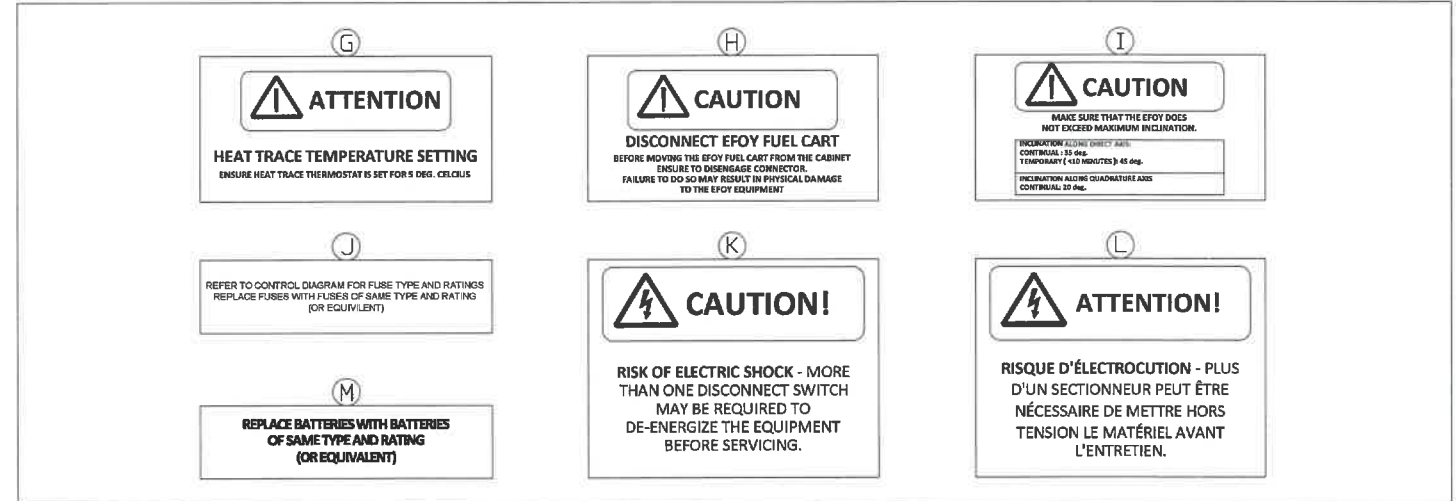
EXHAUST TUBE:
EFOY EXHAUST TUBE CANNOT BE EXPOSED TO ICE BUILD UP. PRO ENERGY BOX SHOULD BE MOUNTED AT HEIGHT TO PREVENT ICE BUILD UP ON EXHAUST TUBE.

VENTING:
EFOY INTAKE AND EXHAUST VENTS CANNOT BE BLOCKED OR RESTRICTED. PRO ENERGY BOX MUST BE MOUNTED TO PREVENT BLOCKAGE OR RESTRICTIONS TO VENTING. INTAKE AIR FILTERS SHOULD BE CLEANED ON A REGULAR BASIS.

MOUNTING OF PRO ENERGY BOX:
THE PRO ENERGY BOX HAS NO PROVISIONS FOR TIE DOWNS. SECURING PRO ENERGY BOX SHALL BE THE RESPONSIBILITY OF OTHERS.

BATTERIES:
BATTERIES ARE INSTALLED BY OTHERS. THE TYPE OF BATTERY AND CONDITION OF BATTERIES CAN IMPACT THE OPERATING CONDITIONS FOR THE EFOY FUEL CELL. FUEL CONSUMPTION MAY BE INCREASED IF BATTERIES ARE IN POOR CONDITION. ENSURE BATTERIES ARE IN NEW CONDITION AND BATTERY SIZING IS WITHIN SPECIFICATION OF EFOY.

SOLAR SYSTEMS:
SOLAR SYSTEMS ARE THE RESPONSIBILITY OF OTHERS. PROPER SIZING OF SOLAR SYSTEMS FOR THE APPLICATION LOADS AND SITE CONDITIONS IS IMPERATIVE. IMPROPER SOLAR SYSTEM SIZING CAN IMPACT EFOY OPERATION HOURS AND FUEL CONSUMPTION.



EFOY EFOY Hybrid System Do's & Don'ts!

INSTALLATION

- * DO NOT place objects in front of the EFOY Pro fuel cell's air intake or outlet
- * DO NOT transport the EFOY Pro fuel cell in temperatures below +3 °C (+38 °F) unless it is in operation (anti-freeze mode)
- * DO NOT add additional panels or batteries to the system without consulting Simark Controls Ltd. (void warranty)
- ✓ DO refer to detailed installation instructions in the manual
- ✓ DO remove the red cap from the exhaust hose
- ✓ DO connect the isolated exhaust hose
- ✓ DO ensure the exhaust hose is routed down and outside the shortest way possible
- ✓ DO ensure the exhaust hose is not kinked or crushed
- ✓ DO ensure the space below the exhaust hose is clear of all debris so there is nothing for ice to build up on
- ✓ DO maintain a minimum distance of 5 cm around the EFOY Pro fuel cell to allow for proper air intake
- ✓ DO keep the fuel cartridge connections clean and free of particles and pollution
- ✓ DO ensure that the voltage settings on the charge controller are within the acceptable threshold (manual)
- ✓ DO start a test cycle to ensure the system is functioning properly once installation is complete (manual)
- ✓ DO ensure the enclosure is securely shut and sealed prior to leaving the installation site

IF EXPOSED TO FREEZING TEMPERATURES

- ✓ DO re-warm the EFOY Pro fuel cell back to room temperature for 24h before attempting to start the system if it was exposed to freezing temperatures for an extended period of time and was not running (risk of damage to the power stack)

OPERATION

- * DO NOT let the EFOY Pro fuel cell run out of fuel (risk of freezing)
- * DO NOT switch the system to manual mode - always keep the system in automatic mode
- * DO NOT cut the connection to the battery bank
- ✓ DO re-warm the EFOY Pro fuel cell back to room temperature for 24h before attempting to re-start IF it was exposed to freezing temperatures for an extended period of time and was not running in anti-freeze mode (due to a system error)
- ✓ DO set the system to use any partially full EFOY fuel cartridges first before using a full EFOY fuel cartridge
- ✓ DO use EFOY fuel cartridge sensor for early warning of low fuel levels to ensure system always has fuel available

RE-FUELING

- * DO NOT install 2 half empty EFOY fuel cartridges when re-fueling, always ensure there is 1 full cartridge installed
- * DO NOT cut the connection to the battery bank
- * DO NOT delay during an EFOY fuel cartridge exchange - max 10 minutes (risk of freezing)
- * DO NOT use any other methanol (void warranty)
- ✓ DO ensure there is at least 1 full EFOY fuel cartridge connected to the system when refueling for proper measurement of remaining fuel levels
- ✓ DO check the exhaust hose to ensure it is free of debris and remove any ice/debris build up below
- ✓ DO keep the fuel cartridge connections clean and free of particles and pollution
- ✓ DO confirm error warning '22' by pressing the 'ok' button after the cartridge exchange is complete

For any EFOY Hybrid system questions please read the user manual or contact the Simark Controls Service Department at (403) 236-0580

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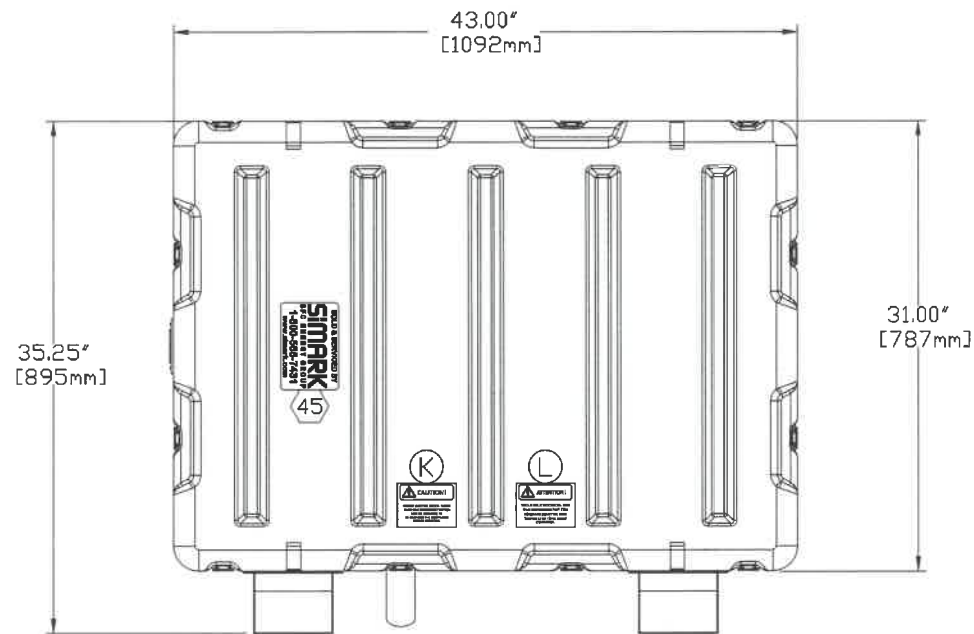
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LAMACOIID SCHEDULE - L1

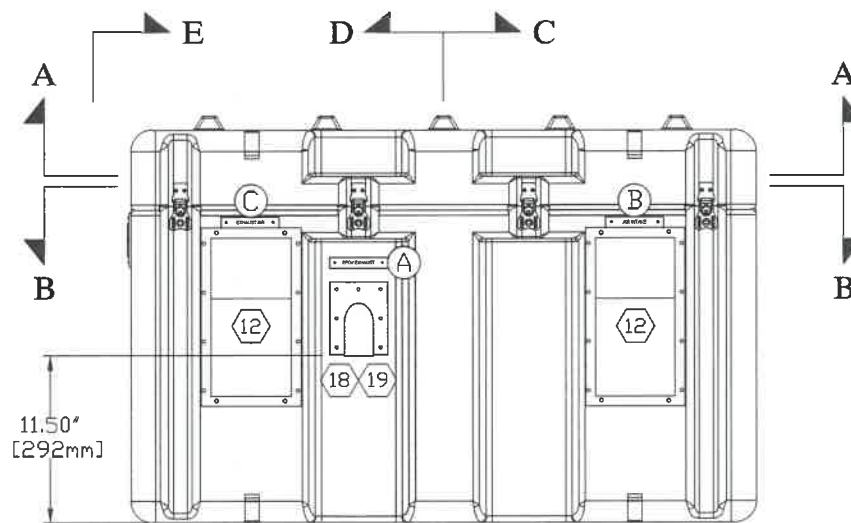


VO No.	VO-31181
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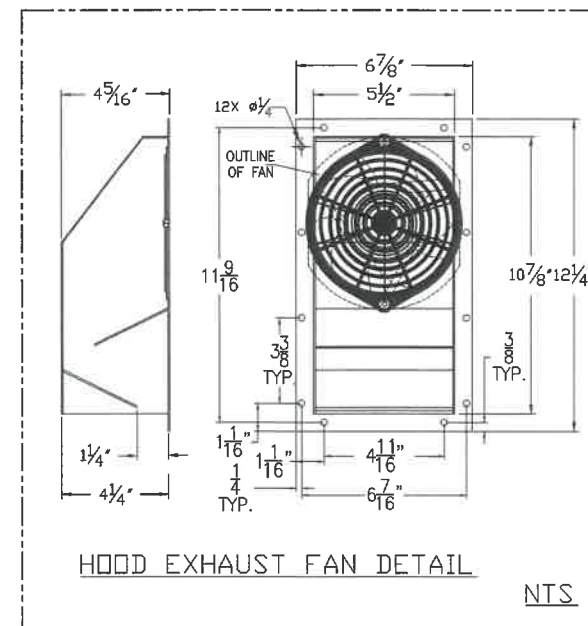
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EFOY BOX TOP EXTERIOR VIEW

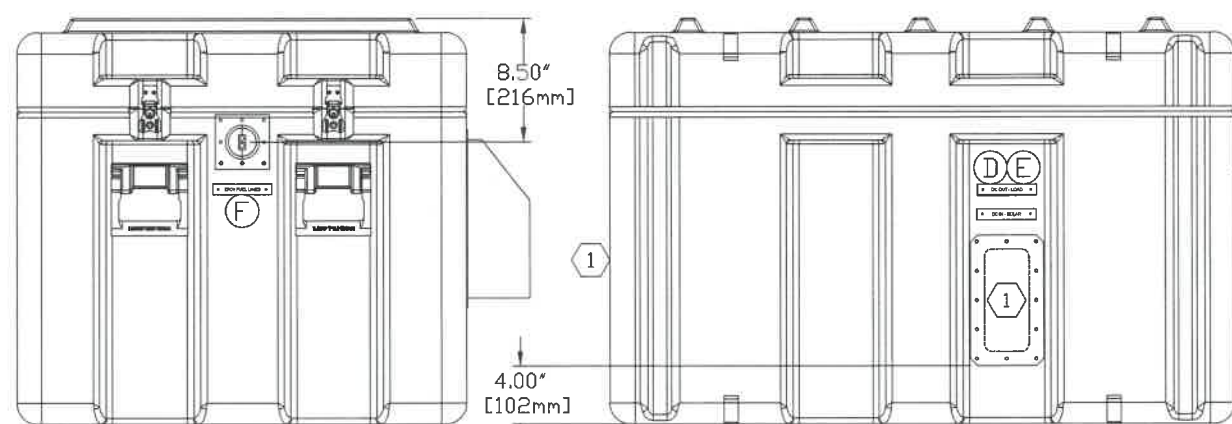


EFOY BOX FRONT EXTERIOR VIEW



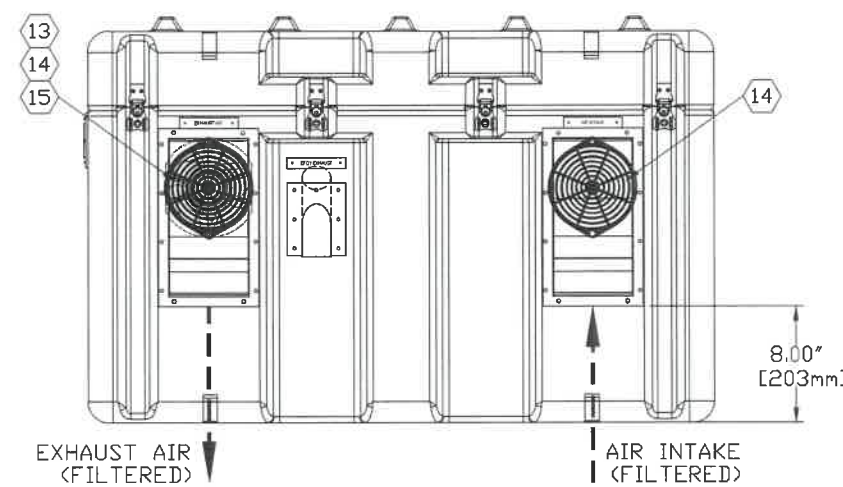
HOOD EXHAUST FAN DETAIL

NTS

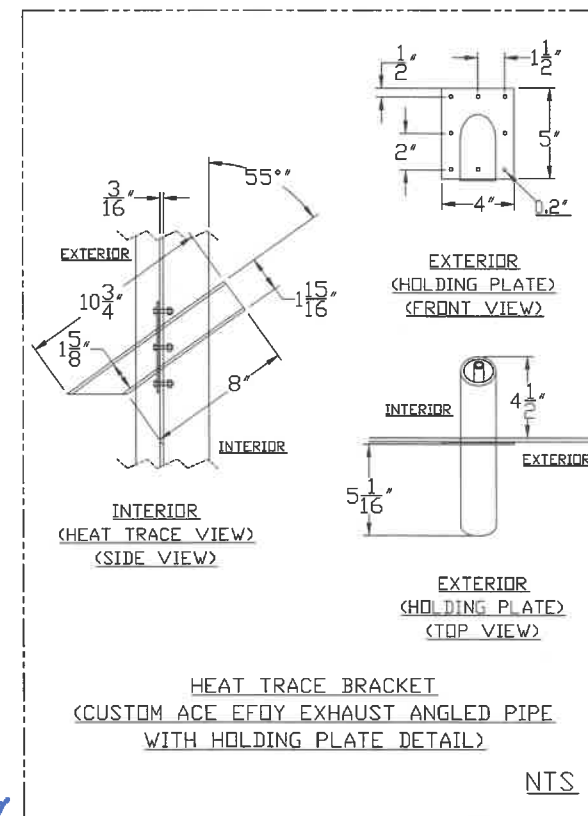


SECTION E-E

EFOY BOX BACK EXTERIOR VIEW



EFOY BOX FRONT EXTERIOR VIEW WITH INTERIOR OF HOOD AND PIPE



HEAT TRACE BRACKET (CUSTOM ACE EFOY EXHAUST ANGLED PIPE WITH HOLDING PLATE DETAIL)

NTS

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SFC ENERGY GROUP

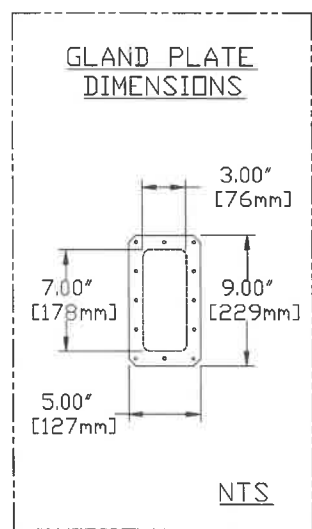
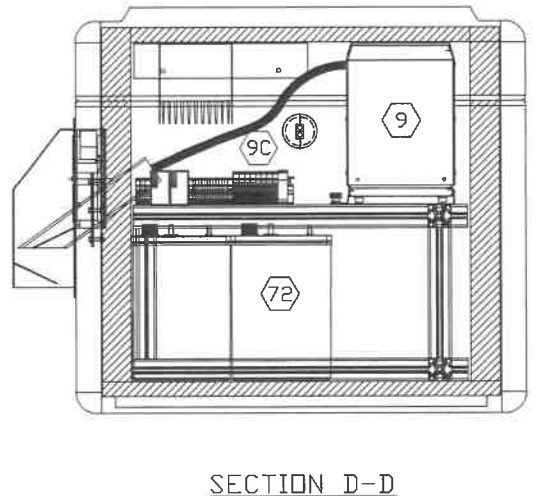
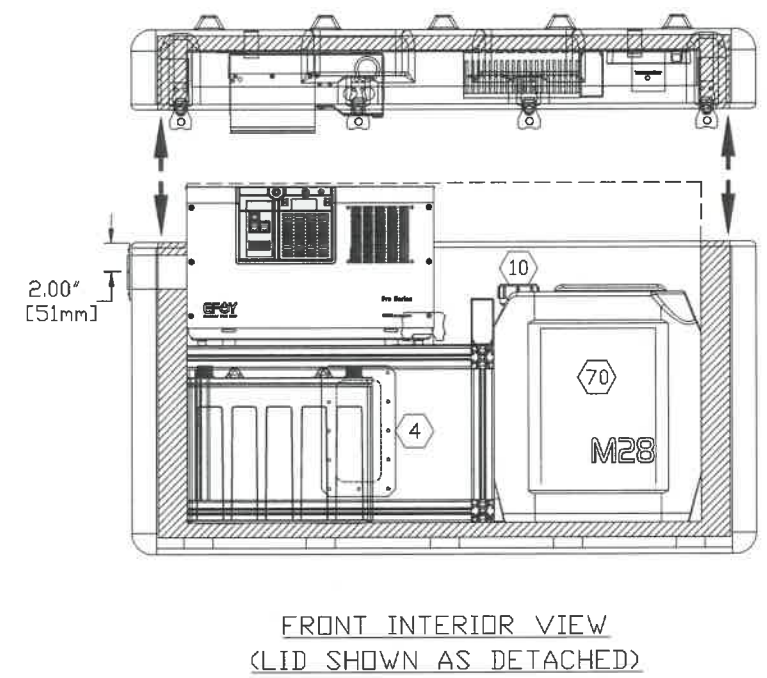
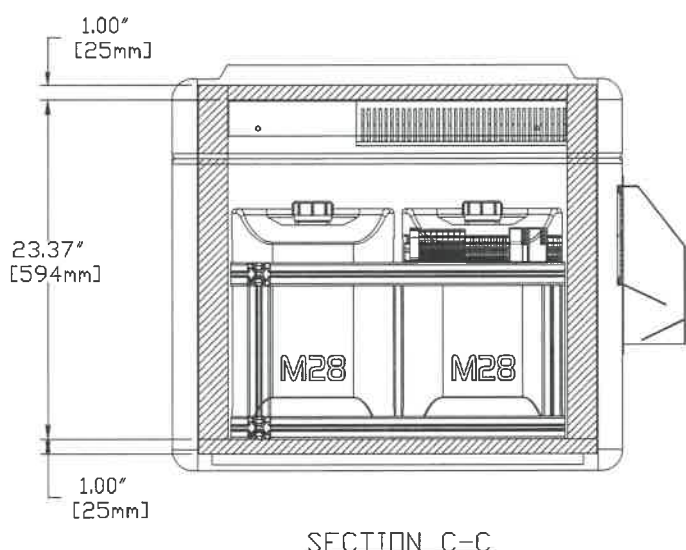
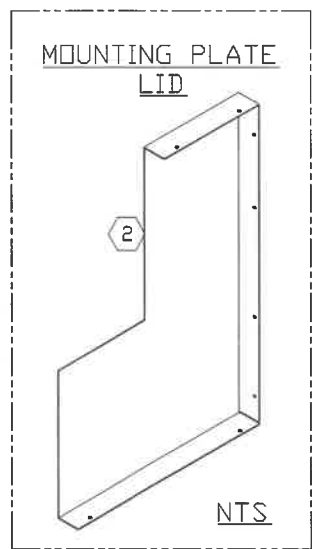
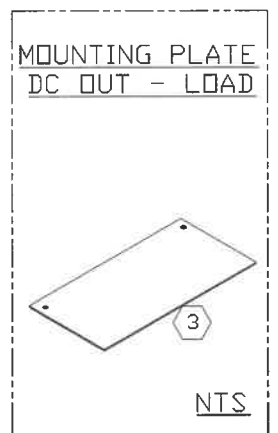
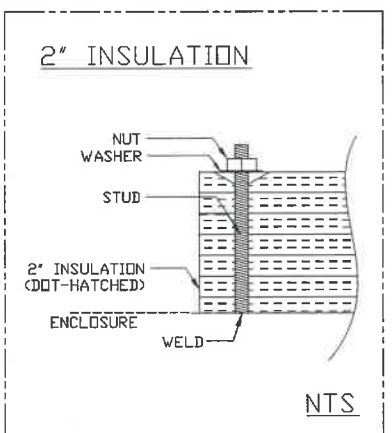
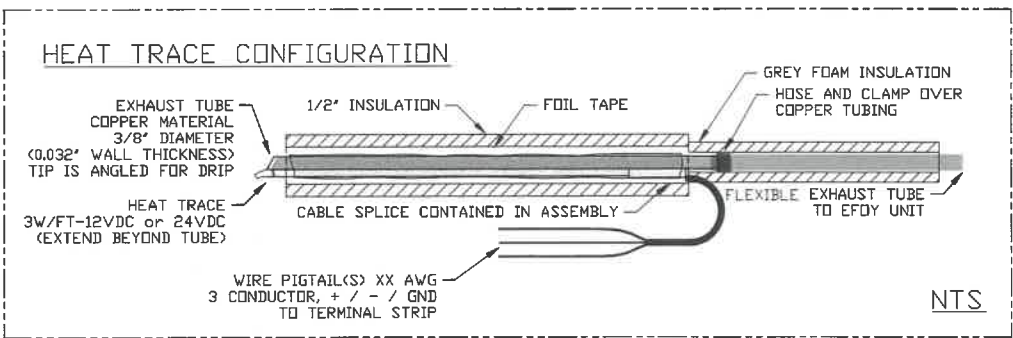
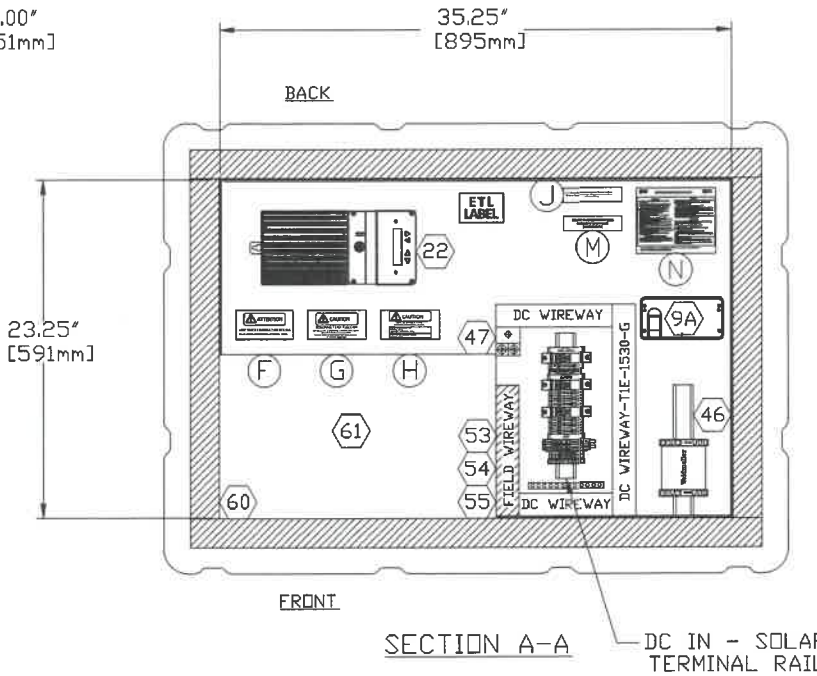
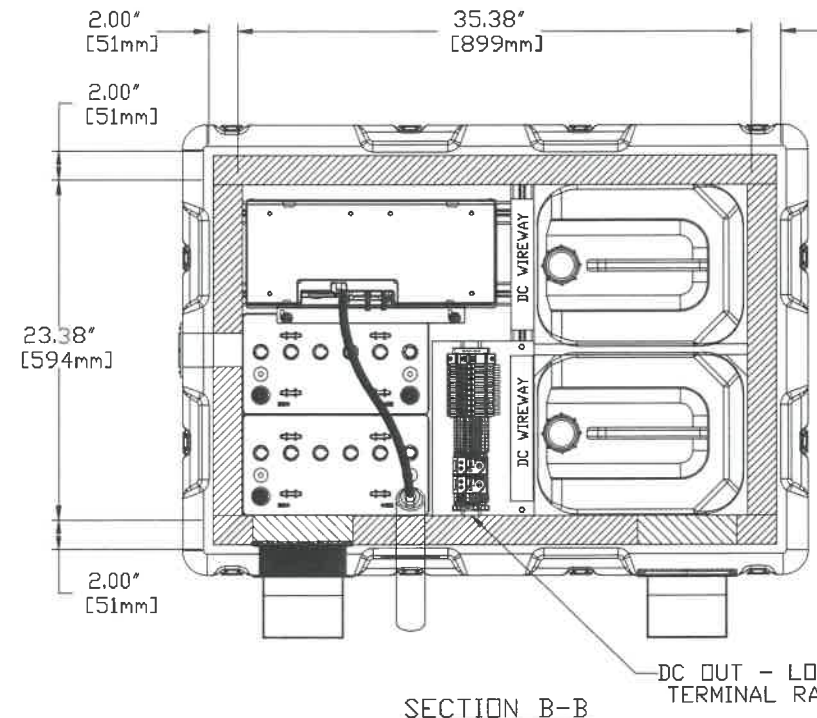
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SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX
EFOY BOX MECHANICAL LAYOUT - M1

WD No. WD-31181
SD No. SD-141228
DWG. NO. 141228-1
SHEET: 4 OF 12

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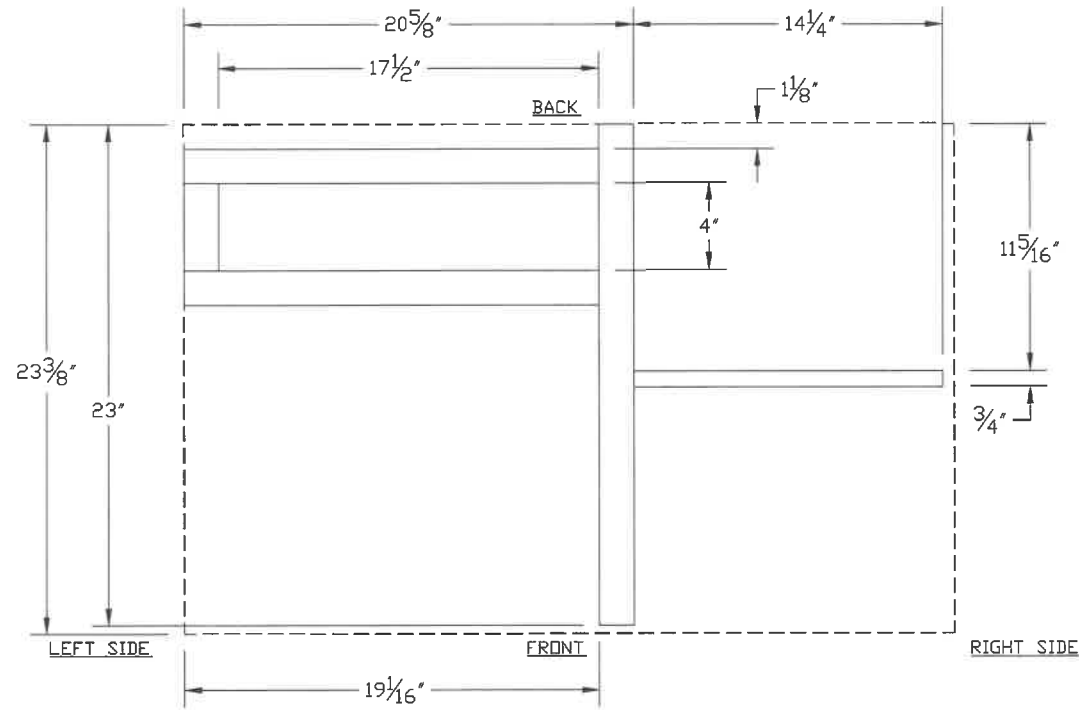
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ENG-DRW
ISO 9001
QUALITY SYSTEM

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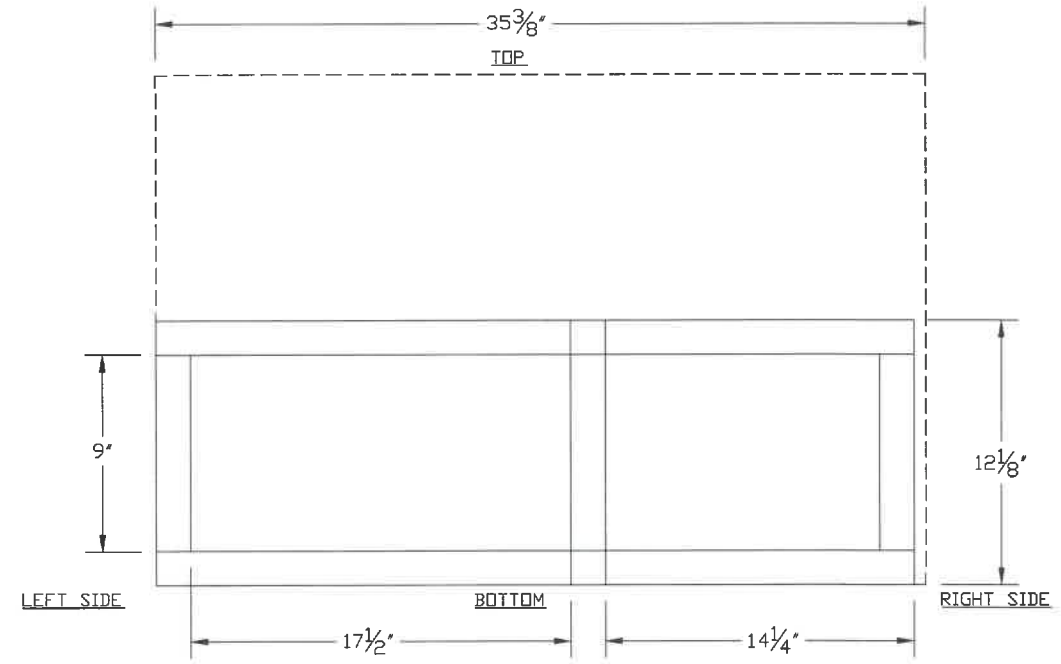
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EFOY BOX MECHANICAL LAYOUT - M2

WD No.	WD-31181
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DWG. NO.	141228-1
SHEET:	5 OF 12

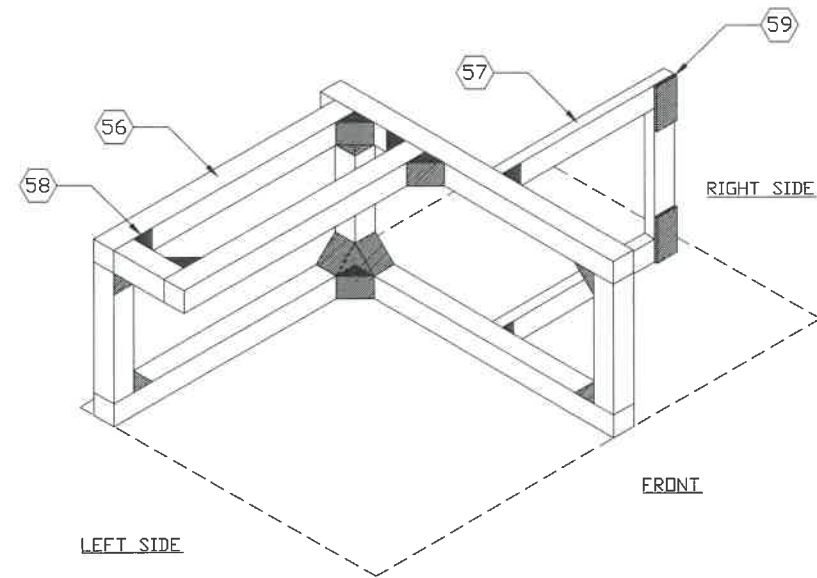
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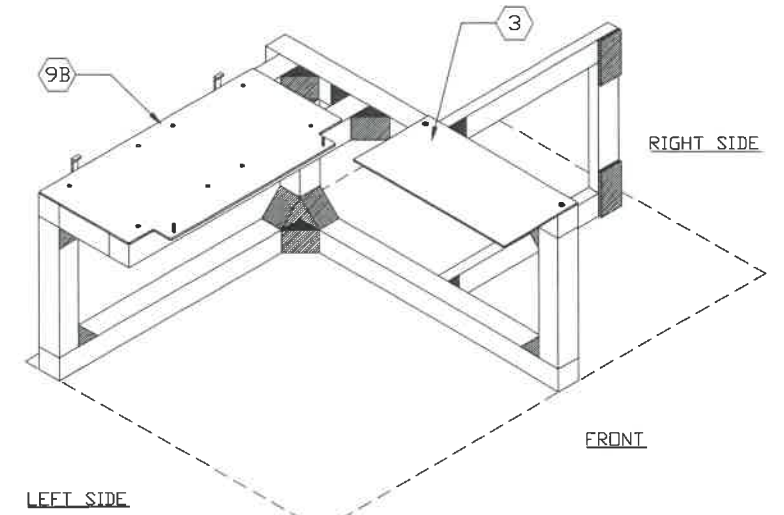
TOP VIEW FRAME DIMENSIONS
NTS



FRONT VIEW FRAME DIMENSIONS
NTS



FRONT LEFT FRAME VIEW
(ISOMETRIC VIEW)
NTS



FRONT LEFT FRAME VIEW
(ISOMETRIC VIEW)
(WITH MOUNTING PLATES)
NTS

CHECKED SEP 18 2018 *[Signature]*

NO.	NOTES	NO.	DATE	REVISIONS	BY	CHK'D	APP'D	DATE APP'D
0	FOR USE IN GENERAL PURPOSE AREA	0	18 SEP 2018	ISSUED FOR CONSTRUCTION	KS	MS	PDT	18 SEP 2018

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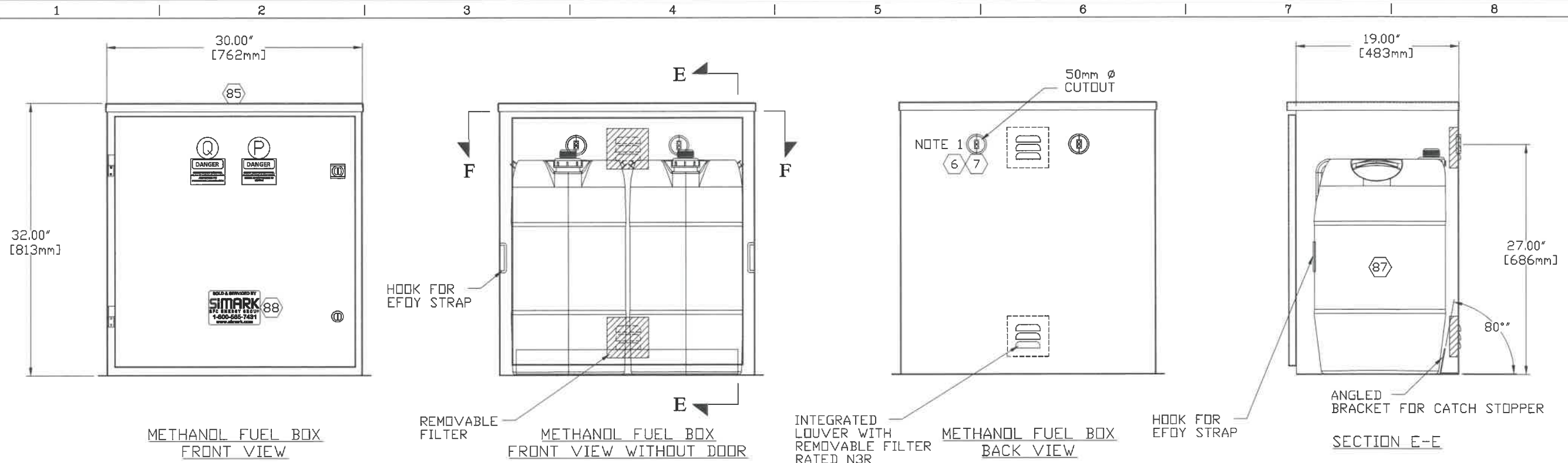
Simark Controls Ltd.
10509 - 46 Street S.E.
Calgary, Alberta, Canada T2C 5C2
Ph: (403) 236-0580, Toll Free: 1-800-565-7431
Fax: (403) 279-6553, Internet: www.simark.com



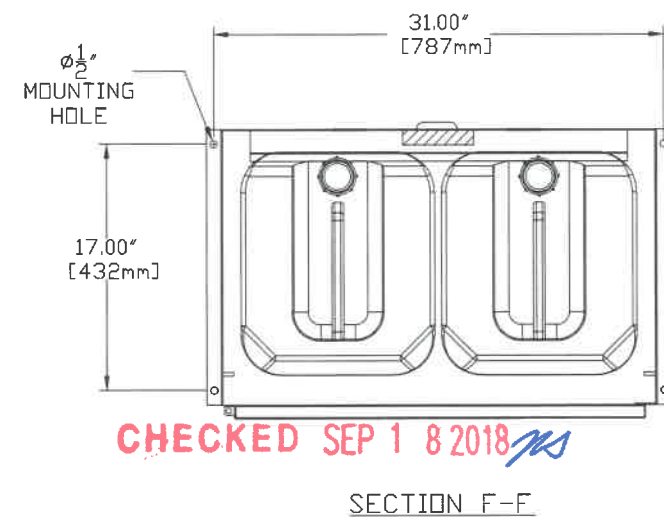
CLIENT: UNIVERSITY OF COLORADO
TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EFOY-NOAA-4060P-2400D-24-M60-2-XX
EFOY BOX MECHANICAL LAYOUT - M3

WD No: WD-31181
SD No: SD-141228
DWG. NO: 141228-1
SHEET: 6 OF 12

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METHANOL FUEL BOX - BILL OF MATERIALS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
6	2	KEL-QTA 50 B	ICDTEK PLUGGABLE ENTRY FRAME	SCL
7	2	QT7	ICDTEK GROMMET 7mm	SCL
8	2	QTB	ICDTEK GROMMET BLANK COVER	SCL
METHANOL FUEL BOX - SOLD SEPARATELY				
NO	QTY	PART NO.	DESCRIPTION	LOC.
85	1	323017-2-MT60	ALLIED N3R DUAL MT60 BOX, 32\"H x 30\"W x 17\"D	SCL
86	1	<C/W ITEM #85>	INTEGRATED LOUVER WITH REMOVABLE FILTER, N3R	SCL
87	2	150 905 124	EFOY FUEL CARTRIDGE MT60	SCL
METHANOL FUEL BOX - CONSUMABLE PARTS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
88	1	-	SIMARK CONTROLS STICKER	SCL
LAMACOID SCHEDULE				
NO	QTY	PART NO.	DESCRIPTION	LOC.
P	3\" X 4\"	B-L/Y-B	METHANOL FUEL WARNING (LAM-G003)<ENG>	
Q	3\" X 4\"	B-L/Y-B	METHANOL FUEL WARNING (LAM-G004)<FRE>	



CHECKED SEP 18 2018 *MS*

- NOTES:
- QUANTITY 2 OF ITEM QTB IS PROVIDED AS A BLANK COVER FOR WHEN THE MT60 FUEL CARTRIDGES ARE NOT EXTERNALLY ATTACHED TO EFOY FUEL LINES. ITEM QTB IS KEPT IN THE SPARE FUSE BOX LOCATED INSIDE OF THE EFOY BOX.

DANGER

CABINET CONTIENT MÉTHANOL LIQUIDE ET VAPEUR INFLAMMABLES. ASSUREZ-VOUS PAS D'OBSTRUCTION À LA VENTILATION

DANGER

CABINET CONTAINS METHANOL FLAMMABLE LIQUID AND VAPOR. ENSURE NO OBSTRUCTION TO VENTING

LAMACOID DETAIL

NO.	NOTES	NO.	DATE	REVISIONS	BY	CHK'D	APP'D	DATE APP'D
0	FOR USE IN GENERAL PURPOSE AREA	0	18 SEP 2018	ISSUED FOR CONSTRUCTION	KS	MS	PDT	18 SEP 2018

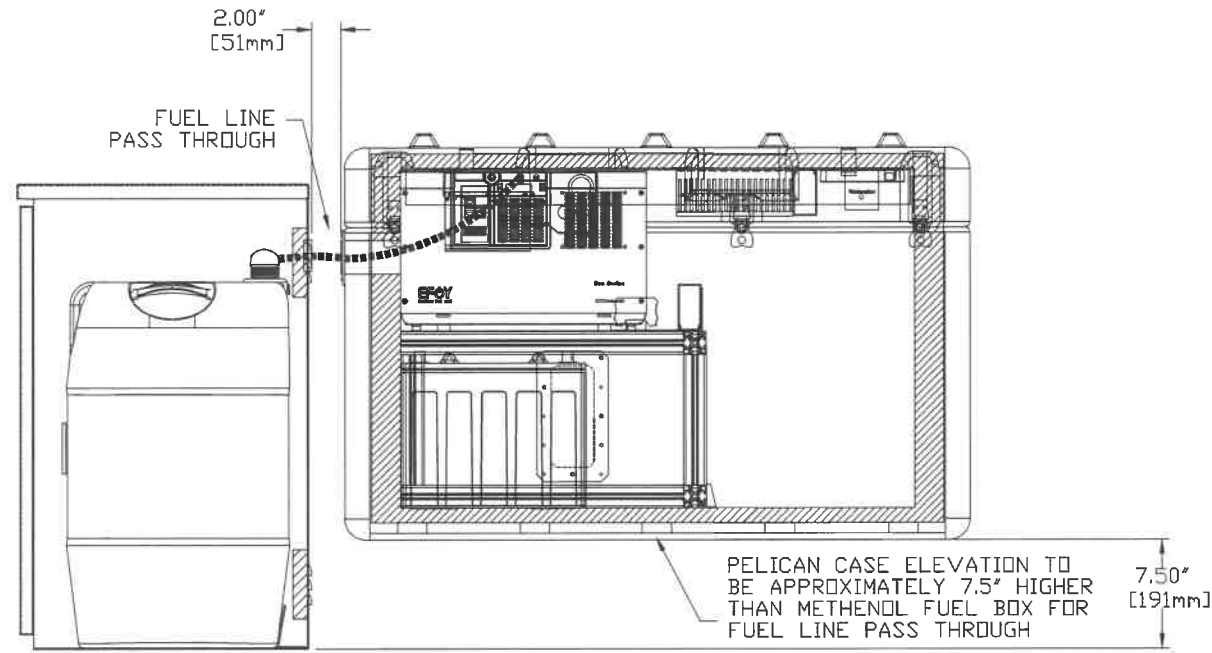
Simark Controls Ltd.
10509 - 46 Street S.E.
Calgary, Alberta, Canada T2C 5C2
Ph: (403) 236-0580, Toll Free: 1-800-585-7431
Fax: (403) 279-6553, Internet: www.simark.com

CLIENT: UNIVERSITY OF COLORADO

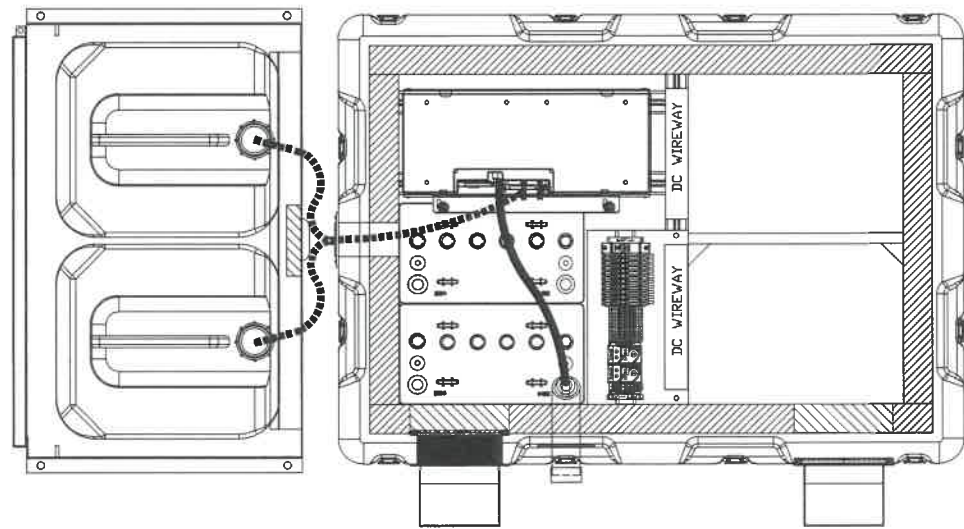
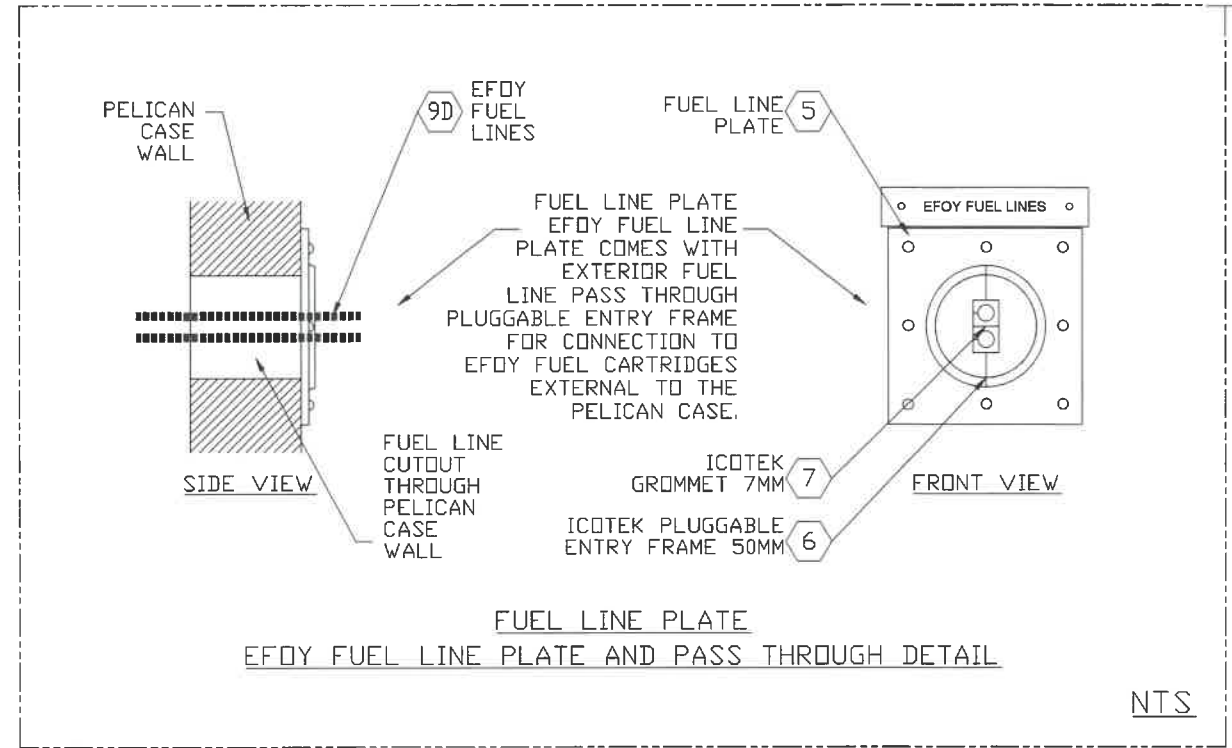
TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX
METHANOL FUEL BOX MECHANICAL LAYOUT - M4

WD No. WD-31181	
SD No. SD-141228	
DWG. NO. 141228-1	
SHEET: 7 OF 12	

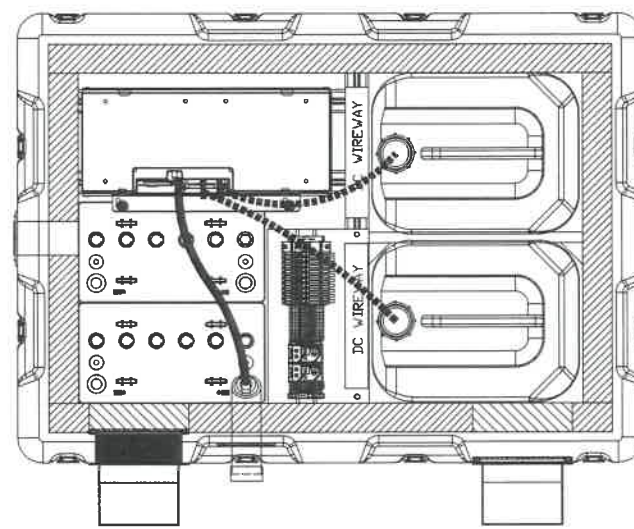
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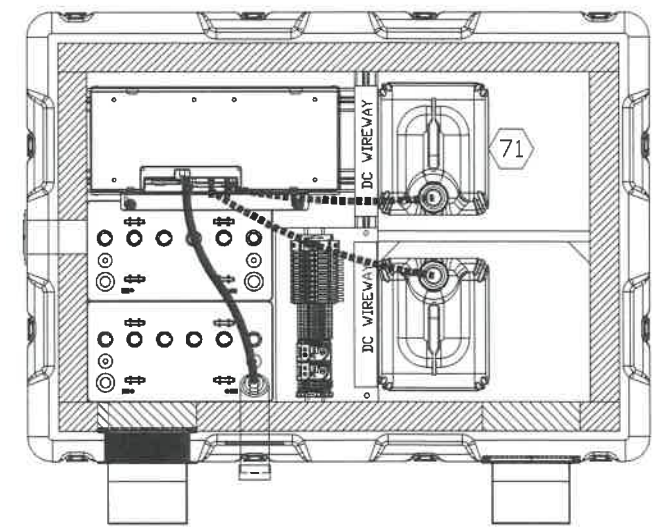
METHANOL FUEL BOX MT60 CONNECTION
FRONT VIEW



METHANOL FUEL BOX MT60 CONNECTION
TOP VIEW



METHANOL FUEL BOX M28 CONNECTION
TOP VIEW



METHANOL FUEL BOX M10 CONNECTION
TOP VIEW

CHECKED SEP 18 2018 *MS*

NO.	NOTES	NO.	DATE	REVISIONS	BY	CHK'D	APP'D	DATE APP'D
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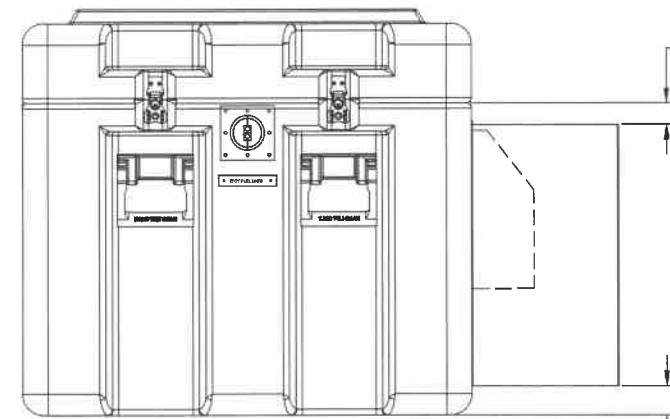
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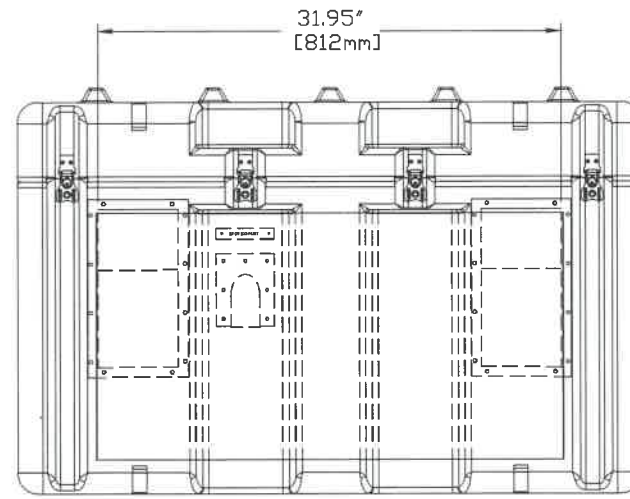
CLIENT: UNIVERSITY OF COLORADO
TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX
METHANOL FUEL CONNECTION MECHANICAL LAYOUT - M5

WD No. WD-31181
SD No. SD-141228
DWG NO. 141228-1
SHEET: 8 OF 12

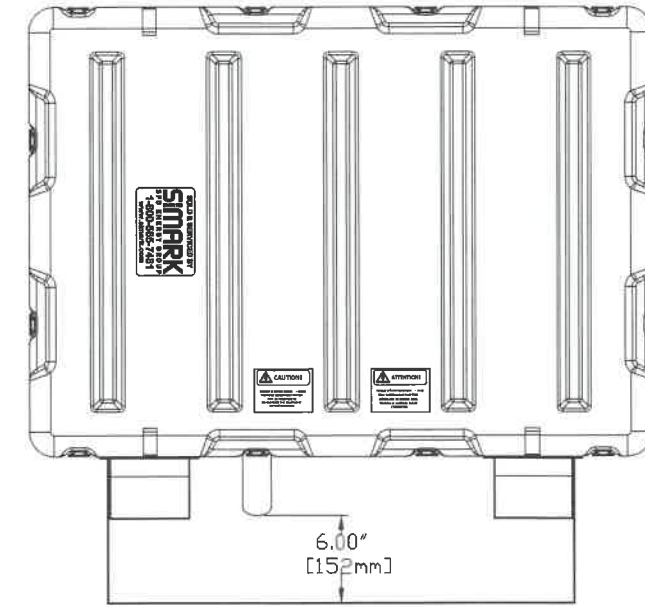
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EFOY BOX SIDE EXTERIOR VIEW

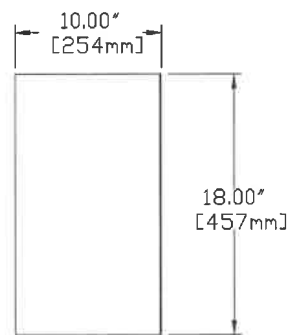


EFOY BOX FRONT EXTERIOR VIEW

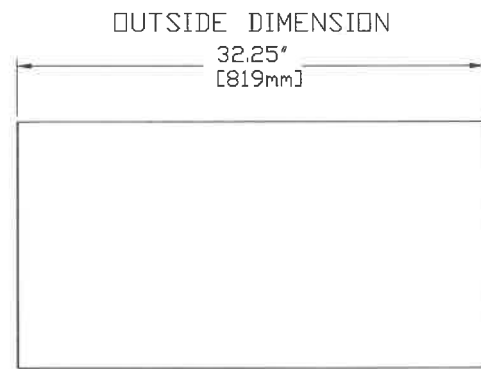


EFOY BOX TOP EXTERIOR VIEW

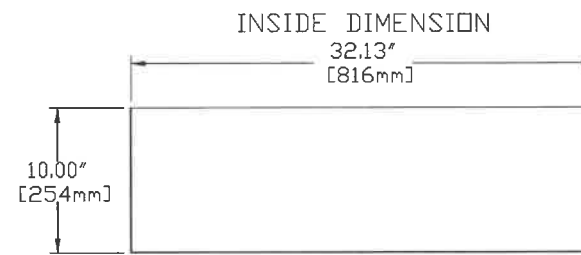
SOLD SEPARATELY - BILL OF MATERIALS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
75	1	EXTERNAL WIND SHIELD	EXTERNAL WIND SHIELD FOR WATER VAPOUR EXHAUST PORT	SCL



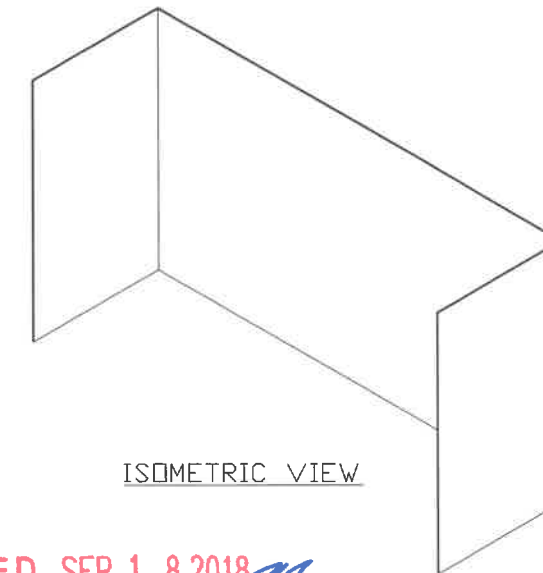
SIDE VIEW



FRONT VIEW



TOP VIEW



ISOMETRIC VIEW

EXTERNAL WIND SHIELD DETAIL

CHECKED SEP 18 2018

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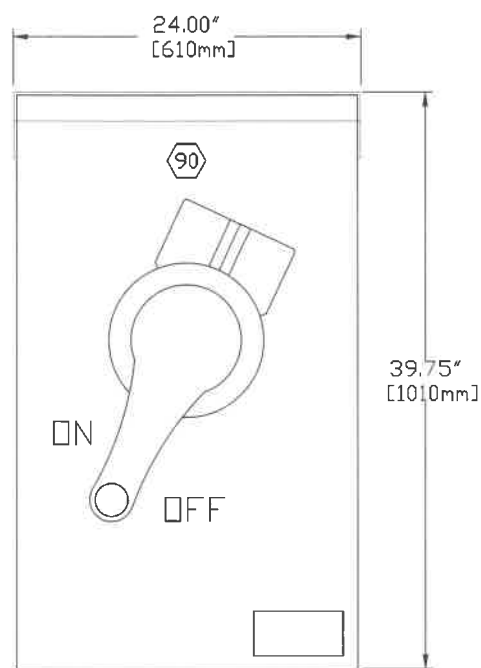
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Calgary, Alberta, Canada T2C 5C2
Ph: (403) 236-0580, Toll Free: 1-800-565-7431
Fax: (403) 279-6553, Internet: www.simark.com



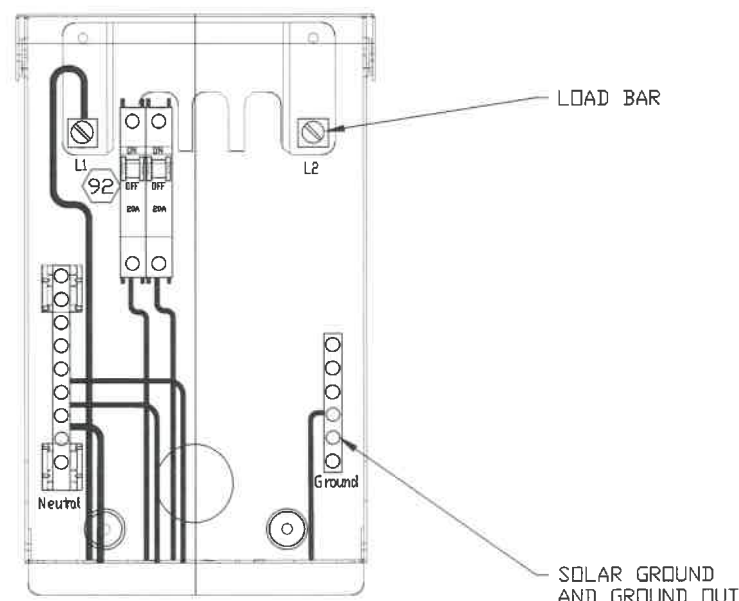
CLIENT: UNIVERSITY OF COLORADO
TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX
EFOY BOX EXTERNAL WIND SHIELD LAYOUT - M6

WD No. WD-31181
SD No. SC-141228
DWG. NO. 141228-1
SHEET: 9 OF 12

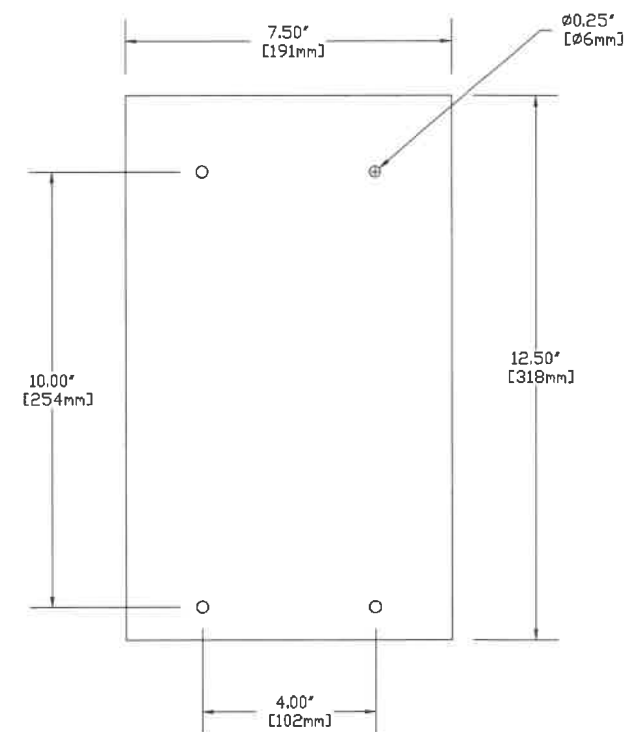
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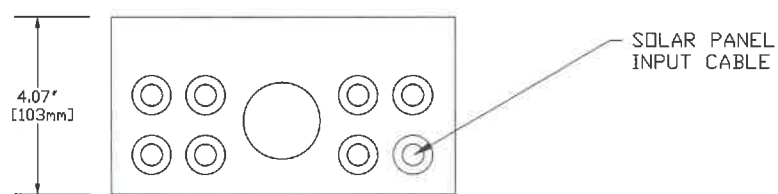
MNPV6-DISCO
EXTERIOR MECHANICAL DETAIL



MNPV6-DISCO
INTERIOR MECHANICAL DETAIL



MNPV6-DISCO
MOUNTING DIMENSIONS



MNPV6-DISCO KNOCKOUT DETAILS

SOLD SEPARATELY - FIELD INSTALLED - BILL OF MATERIALS				
NO	QTY	PART NO.	DESCRIPTION	LOC.
90	1	MNPV6-DISCO	MIDNITE 6 CIRCUIT DISCONNECT SWITCH/COMBINER BOX	SCL
91	1	MN-LA-300	MIDNITE LIGHTNING ARRESTOR 300VDC	SCL
92	2	MNEPV-20	MIDNITE 20 AMP BREAKER FOR CIRCUIT BOX	SCL
93	2	13010	MC-4 CONNECTOR	SCL
94	2	LG395N2W-A5	SHARP SOLAR PANEL, 235W, 8.59A, 24VDC	SCL

CHECKED SEP 18 2018 *MS*

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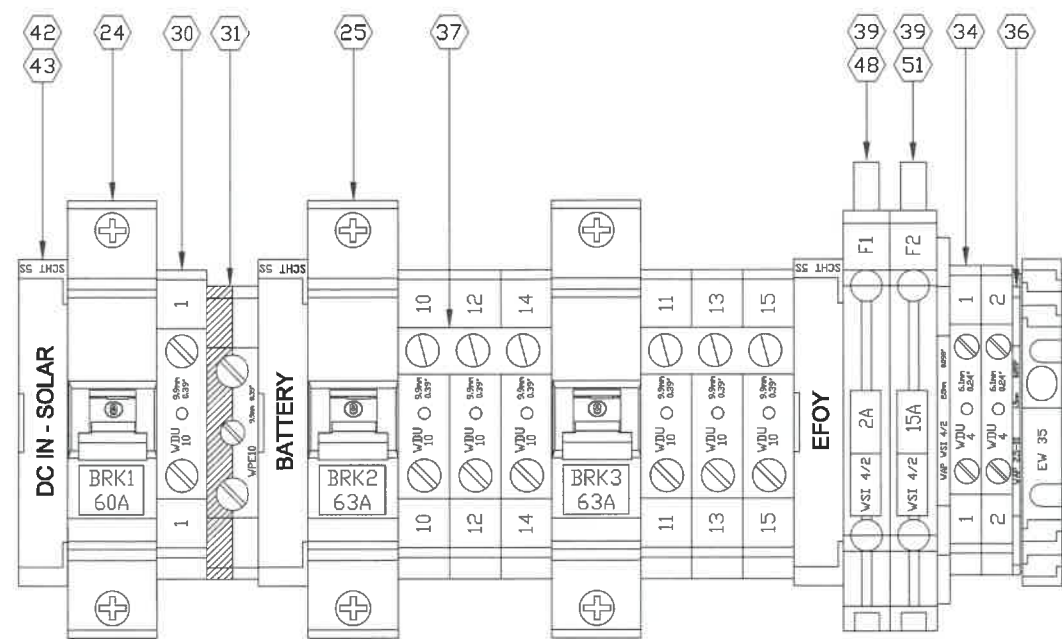
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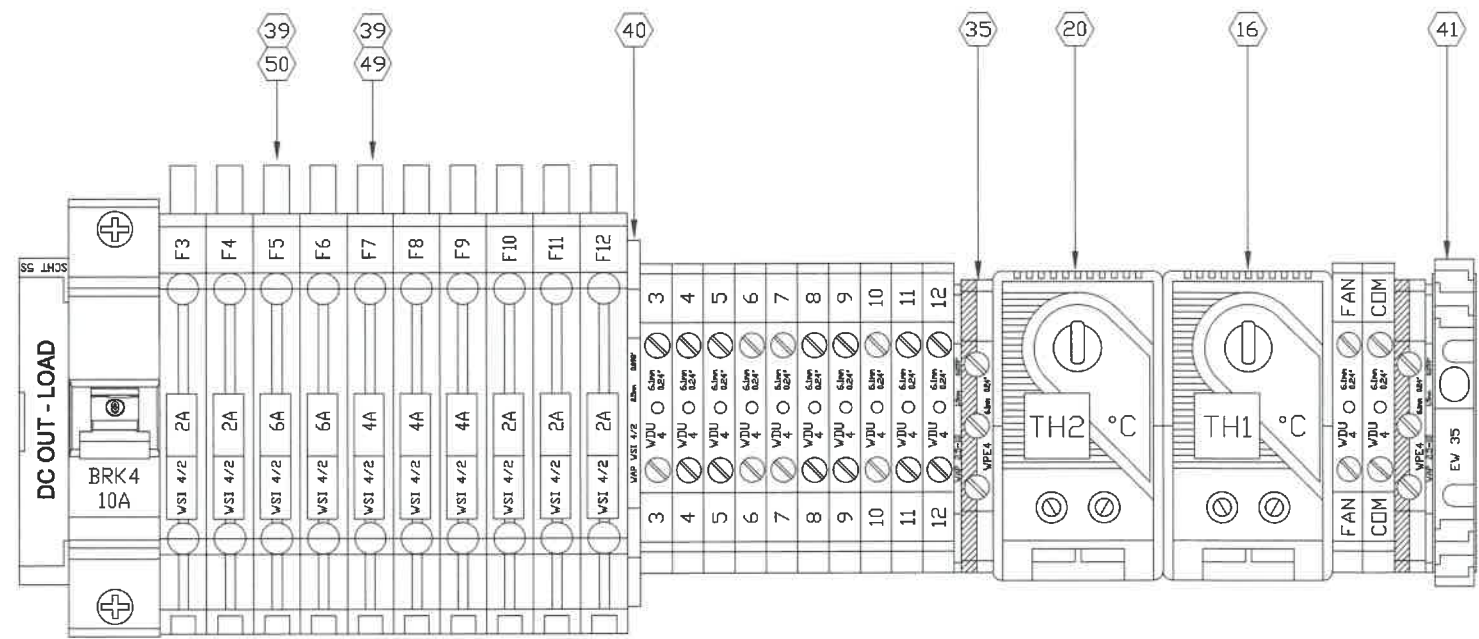
CLIENT: UNIVERSITY OF COLORADO
TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX
COMBINER BOX MECHANICAL LAYOUT - M7

WD No. WD-31181
SD No. SD-141228
DWG NO. 141228-1
SHEET: 10 OF 12

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DC IN - SOLAR TERMINAL RAIL

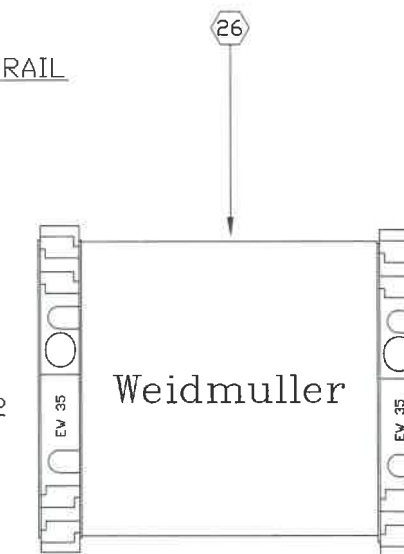


DC OUT - LOAD TERMINAL RAIL

NOTES:

- TOTAL QUANTITY 6 OF ITEM QT6 IS PROVIDED AS A BLANK COVER FOR WHEN THE MT60 FUEL CARTRIDGES ARE NOT EXTERNALLY ATTACHED TO EFOY FUEL LINES. ITEM QT6 IS KEPT IN THE SPARE FUSE BOX.
- QUANTITY OF 2 SPARE FUSES, KEPT IN THE SPARE FUSE BOX ARE PROVIDED PER EACH FUSE SIZE AS SPARE. QUANTITY OF SPARE FUSES ARE INCLUDED IN THE BILL OF A MATERIAL QUANTITIES.

NOTE 1
NOTE 2



SPARE FUSE BOX /QT6 GROMMET HOLDER TERMINAL RAIL

CHECKED SEP 18 2018 *MS*

NO.	NOTES	NO.	DATE	REVISIONS	BY	CHK'D	APP'D	DATE APP'D
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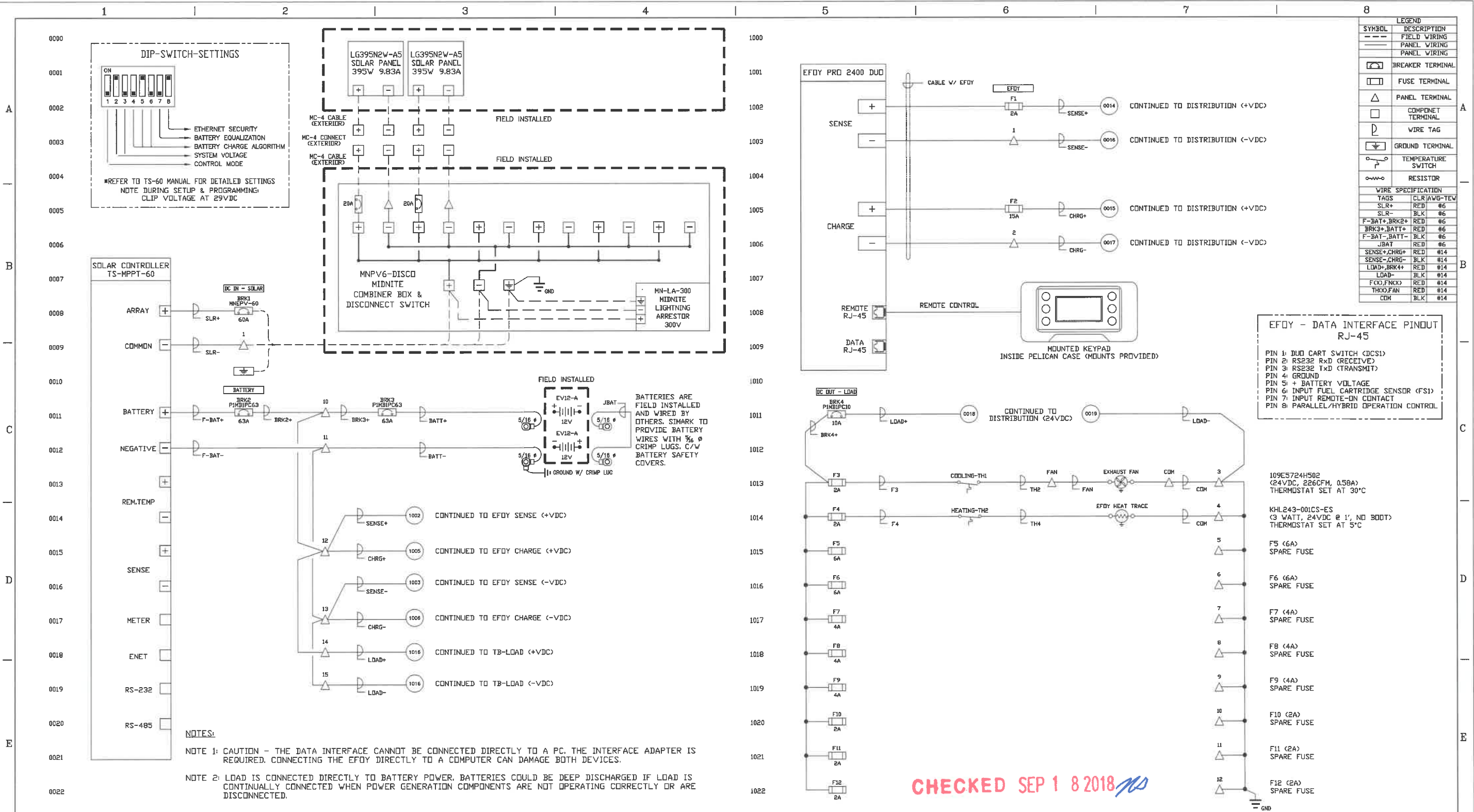
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Ph: (403) 236-0580, Toll Free: 1-800-565-7431
Fax: (403) 279-6553, Internet: www.simark.com

CLIENT: UNIVERSITY OF COLORADO
TITLE: SIMARK CONTROLS EFOY PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EFOY-NDAA-4060P-2400D-24-M60-2-XX
TERMINAL RAIL DETAIL - T1



WD No.	WD-31181
SD No.	SD-141228
DWG. NO.	141228-1
SHEET:	11 OF 12

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CLIENT: UNIVERSITY OF COLORADO
TITLE: SIMARK CONTROLS EF0Y PROENERGYBOX 4060P FUEL CELL SYSTEM
SCL-EF0Y-NDAA-4060P-2400D-24-M60-2-XX
ELECTRICAL SCHEMATIC - E1

WD No.	WD-31181
SD No.	SD-141228
DWG. NO.	141228-1
SHEET:	12 OF 12

CHECKED SEP 18 2018