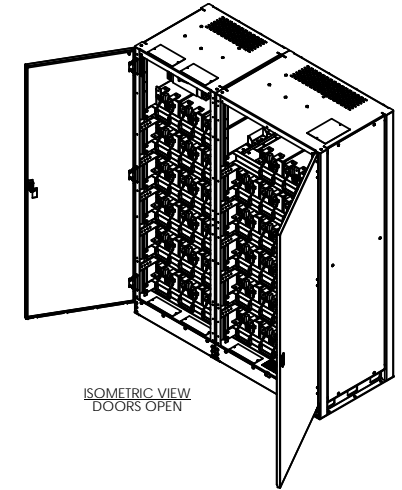
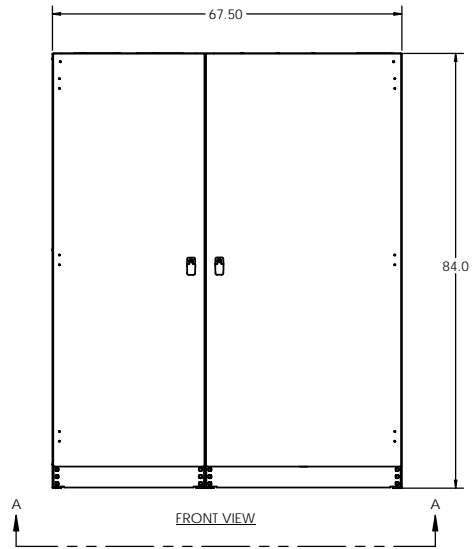


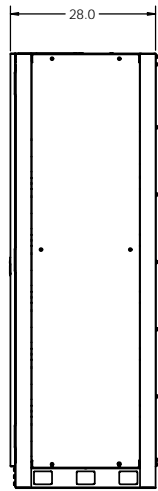
SECTION A-A
BOTTOM VIEW



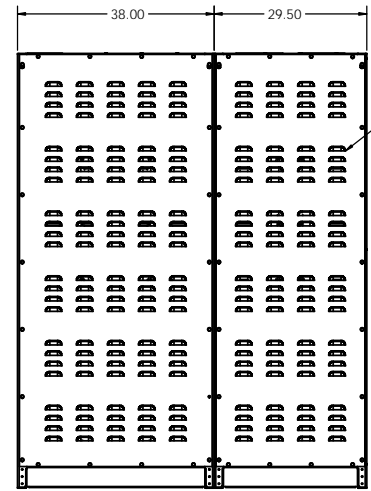
ISOMETRIC VIEW
DOORS OPEN



FRONT VIEW

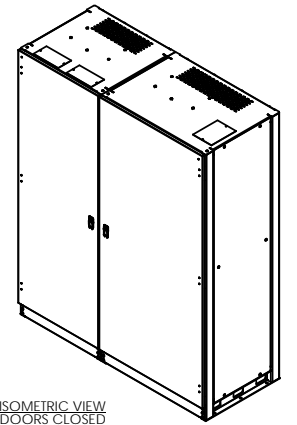


SIDE VIEW



REAR VIEW

VENTILATION
LOUVERS



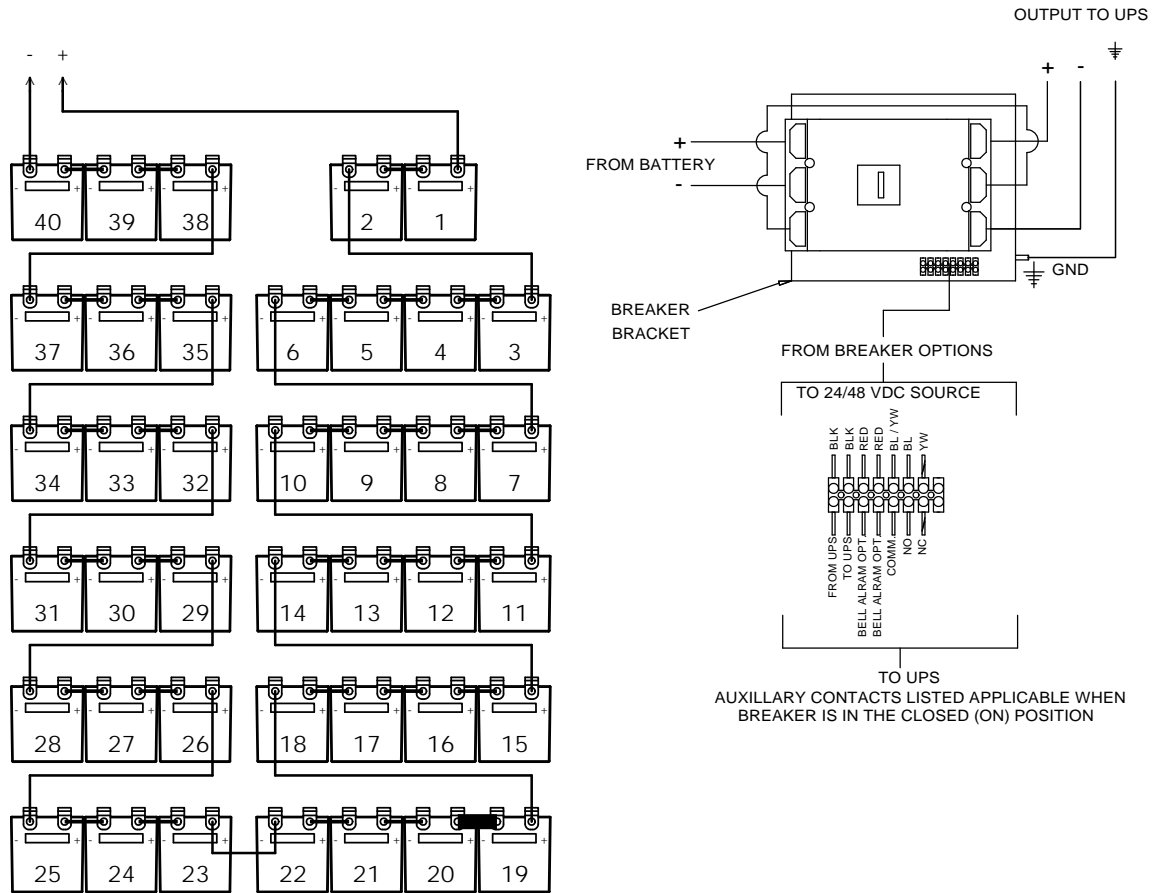
ISOMETRIC VIEW
DOORS CLOSED

- CABINET NOTES:**
1. NEMA 1 DESIGN.
 2. EMPTY CABINET WEIGHT: 1070 LBS (486.4 KG) TOTAL FOR 2 CABINETS FOR 480V STRING
 3. UL 1778 LISTED AND FULLY TESTED AT THE FACTORY PRIOR TO SHIPPING.
 4. FULLY WELDED FRAME. MANUFACTURED FROM HEAVY GAUGE STEEL.
 5. POWDER COATED WITH A CORROSION RESISTANT, EPOXY HYBRID POWDER USING A FIVE STAGE EMERSION PRETREATMENT PROCESS.
 6. BATTERIES CAN BE ACCESSED FROM FRONT, REAR, AND BOTH SIDES.
 7. CUSTOM DESIGNED PALLETS FOR SHIPPING ANYWHERE LOCALLY AND GLOBALLY (UPON REQUEST).
 8. BATTERY CABINET CAN BE MOVED WITH A NORMAL PALLET JACK FROM FRONT AND REAR.
 9. STANDARD AND CUSTOM SPILL CONTAINMENT OPTIONS ARE AVAILABLE.
 10. SEISMICALLY CERTIFIED TO IBC (2012), ASCE 7-10, AND CBC (2010) CODES. DESIGN MEETS DEFAULT SEISMIC DESIGN CATEGORY D (Ss=2.9), IMPORTANCE FACTOR 1.5, AND HORIZONTAL STATIC ACCELERATION OF .817g.

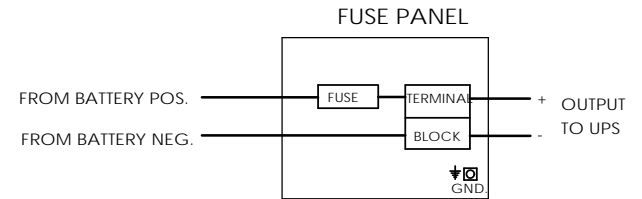
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TITLE: BATTERY CABINET, 12V FT, 4D, 7 X 6					
PROJECTION:	NAME	DATE	SIZE	DWG. NO.	REV
DRAWN BY: RNA		04-26-12	D	EFC63-SPEC	C
SCALE: 1:12				SHEET 1 OF 3	

BREAKER DETAIL



FUSE OPTION



BATTERY CONFIGURATION TABLE					
BATTERY MODEL NUMBER	BATTERY MANUFACTURER				MAXIMUM NUMBER OF BATTERIES PER CABINET
	ENERSYS	C & D	EAST PENN	INTERSTATE	
12HX680	UPS12-745MRF	4DHR6500	HR7000ET	12MJ4500F	40

ELECTRICAL NOTES:

1. ALL CABLES ARE UL LISTED.
2. ALL BREAKERS ARE UL RECOGNIZED.
3. ALL FUSES ARE UL RECOGNIZED, TYPE A50P, A70P OR EQUIVALENT (FUSED CABINETS ARE NOT LISTED IN UL FILE). ALWAYS REPLACE WITH SAME TYPE OR ITS EQUIVALENT.
4. TERMINAL BLOCKS ARE UL RECOGNIZED, 600V RATED.
5. CABINETS ARE SHIPPED WITH THE BREAKER IN THE TRIPPED POSITION.
6. CABINET GROUND CONNECTION IS A 5/16-18 THREADED STUD.
7. CABLES BETWEEN BATTERY CABINET TO UNINTERRUPTIBLE POWER SUPPLY ARE OPTIONAL.

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SCALE: 1:12				SHEET 2 OF 3	

ESS FRONT TERMINAL CABINET SYSTEM MATRIX											
ESS EFC63 CABINET WITH BREAKER SYSTEM PART NUMBERS											
E F C 6 3 A A 40 HX680 B 04 A											
DIGIT 1	DIGIT 2	DIGIT 3	DIGIT 4	DIGIT 5	DIGIT 6	DIGIT 7	DIGIT 8-9	DIGIT 10-14	DIGIT 15	DIGIT 16-17	DIGIT 18
			CABINET MODEL								
	TYPE OF BATTERY	TYPE OF CABINET OR RACK	NUMBER OF TIERS	BATTERY TYPE	COLOR	HEIGHT (INCHES)	BATTERY QUANTITY	BATTERY MODEL PER MANUFACTURER	BREAKER OR FUSE	AMPS	BREAKER OPTION
E = ESS STANDARD	F = FRONT TERMINAL	C = CABINET W/TOP BREAKER	6 = 6 TIER OF BATTERIES	3 = 12V FT (4D ONLY)	**A = BLACK	**A = 84	41	ENERSYS	B = BREAKER	01 = 1000 AMPS	A = 24 VDC SHUNT TRIP, AUX CONTACT
C = CENTER TAP CABLING					B = BEIGE		40	HX680 - 12HX680	H = BREAKER W/HANDLE OPTION	02 = 800 AMPS	B = 48 VDC SHUNT TRIP, AUX CONTACT
S = SPLIT BUS CABLING					C = LIEBERT GRAY		36	C & D		03 = 700 AMPS	C = 24 VDC UVR, AUX CONTACT
					D = MITSUBISHI BEIGE		32	745MR - UPS12-745MRF		04 = 600 AMPS	D = 48 VDC UVR, AUX CONTACT
					E = MGE WHITE		30	EASET PENN		05 = 500 AMPS	E = 120 VDC SHUNT TRIP, AUX CONTACT
					F = TOSHIBA BLACK		24	HR650 - 4DHR6500		06 = 450 AMPS	F = 240 VDC SHUNT TRIP, AUX CONTACT
					G = GE WHITE			HR700 - HR7000ET		07 = 400 AMPS	G = 120 VDC UVR, AUX CONTACT
					H = LIEBERT BLACK			INTERSTATE		08 = 350 AMPS	H = 240 VDC UVR, AUX CONTACT
					I = EATON BLACK			MJ450 - 12MJ4500F		09 = 300 AMPS	J = 24VDC UVR W/BELL ALARM
					J = LIGHT GRAY					10 = 250 AMPS	K = BELL ALARM
										11 = 225 AMPS	
										12 = 200 AMPS	
										13 = 175 AMPS	
										14 = 150 AMPS	
										15 = 125 AMPS	
										16 = 100 AMPS	
										17 = 75 AMPS	
										18 = 50 AMPS	
										19 = 40 AMPS	
										20 = 30 AMPS	
										20 = 30 AMPS	
**REPRESENTS STANDARD COLOR FOR ALL ESS CABINETS (DIGIT 6)											
**REPRESENTS ESS STANDARD HEIGHT OF TOP TERMINAL BATTERY CABINETS (DIGIT 7) ONLY HEIGHT AVAILABLE FOR THIS CABINET											

PART NUMBER GUIDE:

1. REFERENCE THE BATTERY PART NUMBER GUIDE TABLE WHEN ORDERING A CABINET.
 2. WHEN PLACING ORDER, INDICATE THE QTY OF CABINETS. NO DASHES ARE TO BE INCLUDED IN PART NUMBER. OVERALL PART NUMBER OF SYTEM IS ALWAYS 18 DIGITS LONG.
 3. THE BASE NUMBER (DIGITS 1-5) WILL ALWAYS BE THE SAME.
 4. DIGITS 6-7 WILL FOLLOW THE BASE NUMBER INDICATING THE COLOR AND HEIGHT OF THE CABINET.
 5. DIGITS 8-18 MAKE UP THE REST OF THE SYSTEM PART NUMBER WHICH INCLUDE OPTIONS FOR BATTERY QUANTITIES, BATTERY MODEL, AND BREAKER OPTIONS.
 6. EXAMPLE: **EFC63AA** - THIS REPRESENTS A STANDARD **EFC63** CABINET, WITH A POWDER COAT FINISH OF STANDARD BLACK AND 84.00" HEIGHT.
- PLEASE NOTE: ONLY STANDARD CABINETS (COLOR AND HEIGHT) ARE IN STOCK. MINIMUM ORDERS OF 20 OR MORE CABINETS ARE REQUIRED FOR NON STANDARD CABINETS UNLESS IT IS THROUGH OEM CONTRACTS.

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PROJECTION:	NAME: RNA	DATE: 04-26-12	SIZE: D	DWG. NO. EFC63-SPEC	REV: C
SCALE: 1:12				SHEET 3 OF 3	