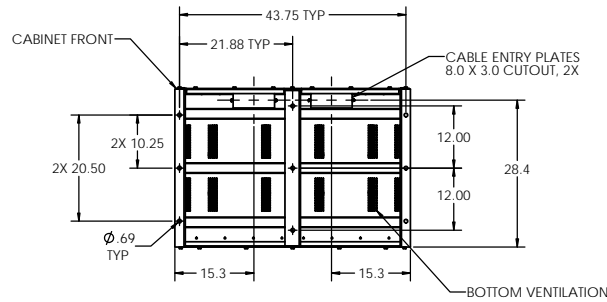
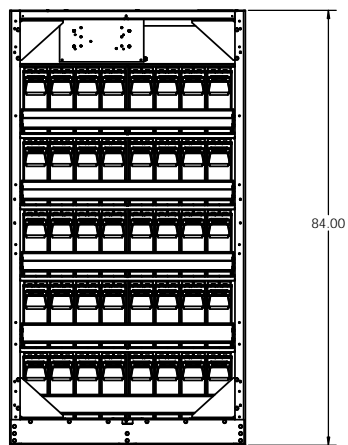
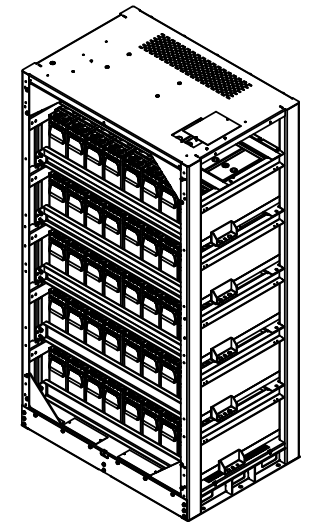


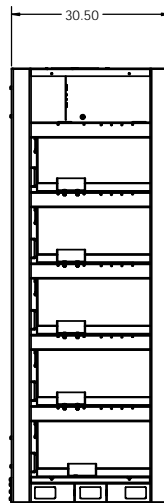
TOP VIEW



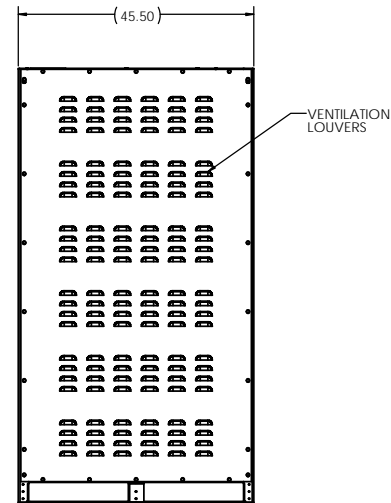
SECTION A-A
BOTTOM VIEW



FRONT VIEW



SIDE VIEW



REAR VIEW

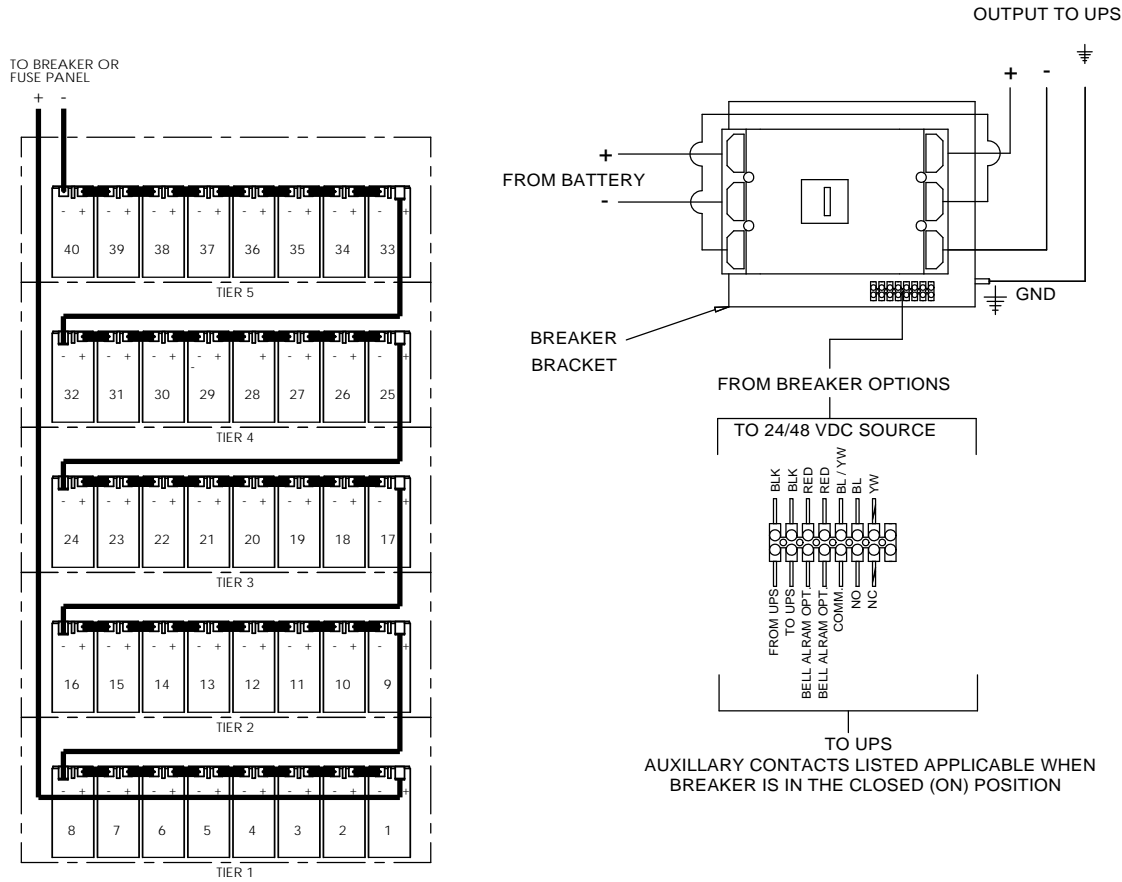
RACK NOTES:

1. EMPTY RACK WEIGHT: 681 LBS
2. FULLY WELDED FRAME. MANUFACTURED FROM HEAVY GAUGE STEEL.
3. ALL BATTERY TERMINALS HAVE POLYCARBONATE COVER.
4. OPTIONAL WALL MOUNTED BREAKER ENCLOSURES ARE AVAILABLE.
5. POWDER COATED WITH A CORROSION RESISTANT POWDER USING A FIVE STAGE EMERSON 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 RACK CAN BE MOVED WITH A NORMAL PALLET JACK FROM FRONT AND REAR.
9. STANDARD AND CUSTOM SPILL CONTAINMENT OPTIONS ARE AVAILABLE.

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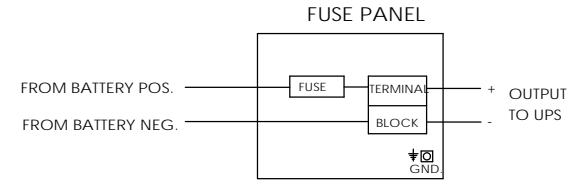
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES		Electronic Systems Support www.ess.to		3233 W. Kingsley Rd. Garland, Texas 75041 PH. 972-272-2468 FAX 972-276-9844	
PROJECTION:		TITLE: BATTERY RACK, 12V, 480V, HD		REV B	
DRAWN BY: RNA	DATE: 03-05-13	SIZE: D	DWG. NO.: EFR54-SPEC	SHEET 1 OF 3	
SCALE: 1:12					

BREAKER DETAIL



BATTERY CONFIGURATION TABLE		
	BATTERY MANUFACTURER	MAXIMUM NUMBER OF BATTERIES PER CABINET
	EAST PENN	
BATTERY MODEL NUMBER	HR7500ET	40
	HT7500ET	

FUSE OPTION



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. ALWAYS REPLACE WITH SAME TYPE OR ITS EQUIVALENT.
4. TERMINAL BLOCKS ARE UL RECOGNIZED, 600V RATED.
5. RACKS ARE SHIPPED WITH THE BREAKER IN THE TRIPPED POSITION.
6. RACK GROUND CONNECTION IS A 5/16-18 THREADED STUD.
7. CABLES BETWEEN BATTERY RACK TO UNINTERRUPTIBLE POWER SUPPLY ARE OPTIONAL.

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TITLE: BATTERY RACK, 12V, 480V, HD					
PROJECTION:	NAME	DATE	SIZE	DWG. NO.	REV
	DRAWN BY	RNA	03-05-13	EFR54-SPEC	B
SCALE: 1:12				SHEET 2 OF 3	

ESS FRONT TERMINAL RACK SYSTEM MATRIX											
ESS EFR54 RACK SYSTEM PART NUMBERS											
E F R 5 4 A A 40 750ET 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	R = RACK	5 = 5 TIER OF BATTERIES	4 = 12V FT (HR7500ET)	**A = BLACK	**A = 84	40	EAST PENN	B = BREAKER	04 = 600 AMPS	A = 24 VDC SHUNT TRIP, AUX CONTACT
C = CENTER TAP CABLING					B = BEIGE		36	750ET - HR7500ET		05 = 500 AMPS	B = 48 VDC SHUNT TRIP, AUX CONTACT
S = SPLIT BUS CABLING					C = LIEBERT GRAY		32	HT750 - HT7500ET		06 = 450 AMPS	C = 24 VDC UVR, AUX CONTACT
					D = MITSUBISHI BEIGE		24			07 = 400 AMPS	D = 48 VDC UVR, AUX CONTACT
					E = MGE WHITE					08 = 350 AMPS	E = 120 VDC SHUNT TRIP, AUX CONTACT
					F = TOSHIBA BLACK					09 = 300 AMPS	F = 240 VDC SHUNT TRIP, AUX CONTACT
					G = GE WHITE					10 = 250 AMPS	G = 120 VDC UVR, AUX CONTACT
					H = LIEBERT BLACK					11 = 225 AMPS	H = 240 VDC UVR, AUX CONTACT
					I = EATON BLACK					12 = 200 AMPS	J = 24VDC UVR W/BELL ALARM
					J = LIGHT GRAY					13 = 175 AMPS	K = BELL ALARM
										14 = 150 AMPS	
										15 = 125 AMPS	
										16 = 100 AMPS	
										17 = 75 AMPS	
										18 = 50 AMPS	
										19 = 40 AMPS	
										20 = 30 AMPS	
										18 = 50 AMPS	
										19 = 40 AMPS	
										20 = 30 AMPS	
<p align="center">**REPRESENTS STANDARD COLOR FOR ALL ESS RACKS (DIGIT 6)</p> <p align="center">**REPRESENTS ESS STANDARD HEIGHT OF TOP TERMINAL BATTERY RACKS (DIGIT 7) ONLY HEIGHT FOR THIS RACK</p>											

PART NUMBER GUIDE:

1. REFERENCE THE BATTERY PART NUMBER GUIDE TABLE WHEN ORDERING A RACK.
 2. WHEN PLACING ORDER, INDICATE THE QTY OF RACKS. 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 RACK.
 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: **EFR54AA** - THIS REPRESENTS A STANDARD **EFR54** RACK, WITH A POWDER COAT FINISH OF STANDARD BLACK AND 84.00" HEIGHT.
- PLEASE NOTE, ONLY STANDARD RACKS (COLOR AND HEIGHT) ARE IN STOCK. MINIMUM ORDERS OF 20 OR MORE RACKS ARE REQUIRED FOR NON STANDARD RACKS UNLESS IT IS THROUGH OEM CONTRACTS.

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TITLE: BATTERY RACK, 12V, 480V, HD				REV	
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SIZE: D		DWG. NO.: EFR54-SPEC		SHEET 3 OF 3	
SCALE: 1:12					